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## In This Issue

### Deluxe Coach Trains Added to Service on the Southern . . . . . Page 793

This article gives details on the Southern's two deluxe coach trains, the  
"Southerner" and the "Tennessean," which have been placed in service between  
the Atlantic seaboard and the South.

### Railroads Face Grave Emergency . . . . . 800

Abstracts from an address delivered before the American Mining Congress  
at Cincinnati, Ohio, by Ralph Budd, Transportation Commissioner on the  
Advisory Commission to the Council of National Defense.

### Installs Large Portal Cranes on Timber Pier . . . . . 807

The two high-speed versatile machines installed by the Chesapeake & Ohio on  
an existing tide-water timber pier at Newport News, Va., are described in  
this article. The cranes are designed especially for handling manganese,  
chromium ore and other heavy cargo.

## EDITORIALS

Prospective Railway Traffic and Equipment . . . . . 789

## GENERAL ARTICLES

Myopia vs. Magnanimity . . . . . 792  
Deluxe Coach Trains Added to Service on the Southern . . . . . 793  
Railroads Face Grave Emergency, by Ralph Budd . . . . . 800  
Railroads Need 5-Million Tons of Steel in 1941 . . . . . 802  
A. A. R. Suggests Large Car-Buying Program . . . . . 803  
Illinois Central Revamps Land and Tax Records . . . . . 805  
Installs Large Portal Cranes on Timber Pier . . . . . 807

## NEWS . . . . . 811

## REVENUES AND EXPENSES OF RAILWAYS . . . . . 828

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# Prospective Railway Traffic and Equipment

Recent developments in transportation have been highly significant and important. Loadings of freight in 1940 were about  $36\frac{1}{3}$  million cars. In the first one-third of 1941 they increased 12 per cent in spite of the coal strike in April. If the increase in the entire year should be only at that rate, they would amount in 1941 to about 41 million cars.

The railways on April 1, 1941, owned 1,644,396 cars. They had on order on that date 42,335 new cars; and the compilation made by the *Railway Age* and published elsewhere in this issue shows 16,091 were ordered in April. This made orders 100,876 in the twelve months ended April 30—an increase of 44,580 over orders in the twelve months ended April 30, 1940, and larger than in any calendar year since 1929, when they were 111,321. The railways also ordered 52 locomotives in April, making the number ordered by them in the first four months of the year 321. In addition, 98 were ordered by the government and industry, making a total of 419—the largest total ordered in the first third of any year since before the depression.

The Association of American Railroads on May 1 sent to the chief executives of the railroads estimates that freight loadings in 1942 will be almost 44 million cars, an increase of 21 per cent over 1940, and that, in order to provide for handling that much traffic, the railroads should increase the cars owned by them in 1941 by 120,000 cars. It also estimated that in 1943 loadings will be 48 million cars, or 32 per cent more than in 1940, and that, in order to handle that much traffic, the railways should further increase the cars owned by them by 150,000.

It is important to emphasize that this means not merely that the railroads should acquire the numbers of new cars mentioned, but that they will require 270,000 **more** cars to handle the traffic of 1943 than to handle that of 1941. Consequently, for example, if they should meantime retire 100,000 cars, they would have to acquire 370,000 for both replacements and additions to have enough in 1943. These estimates largely

exceed any heretofore made regarding prospective increases of traffic and of the amount of equipment that will be needed to handle it.

### Traffic Increases Faster Than Estimates

On February 24, and again on May 1, Ralph Budd, transportation member of the Advisory Commission on National Defense, delivered addresses in which he discussed whether the country's transportation capacity, and especially that of the railroads, would prove equal to the demands and showed how estimates of future traffic were being made. There have been available, first, the freight traffic forecasts of the thirteen Shippers' Regional Advisory Boards, and, second, studies by the Bureau of Research and Statistics, Advisory Commission to the Council of National Defense, estimating both the tonnage of various commodities that would be required for defense work and the tonnage that would be required for non-defense activities. These estimates, especially the latter, were carefully examined by the Bureau of Railway Economics in terms of railroad transportation and the results translated into equivalent carloads of revenue freight, leading to the conclusion that the increase in railroad carloadings in 1941 over 1940 would be 9.4 per cent.

It has become evident now that this estimate, although so carefully made, was too small. The increase in loadings in the first quarter of 1941 was 15 per cent. This was before the coal strike; and first quarter loadings, especially in March, were inflated by large shipments of coal made to build up supplies in anticipation of the strike. However, even in April, when coal loadings averaged only about 40,000 cars a week—as compared with 164,000 a week in March—total carloadings exceeded those of April, 1940, by 12 per cent. Of even more significance is the fact that the increase in carloadings, **exclusive of coal**, in the first three months of the year was only 17 per cent, while in April, **exclusive of coal**, the increase was 28 per cent. Load-

ings in April, exclusive of coal, averaged almost 658,000 cars weekly. If, in addition, there had been weekly loadings of coal averaging only 125,000 cars, total weekly loadings in April would have averaged 783,000 cars, or 26 per cent more than in April, 1940.

### Industry's Surplus Capacity Greater Than in 1917

Why has the increase in traffic been so largely exceeding the original estimate? Will the increase continue to accelerate? "Such studies will be continued and revised while the preparedness activity continues," said Mr. Budd in his address before the American Mining Congress on May 1, thereby indicating plainly his realization that current conditions and developments in the United States are entirely unprecedented, and that forecasts based on trends prevailing today may soon have to be changed because of changes accelerating or decelerating those trends.

There is one important contrast between the conditions that existed in this country when it entered the first Great War, and those that existed when it began adopting its present defense program less than a year ago, which has never been emphasized enough. Before this country entered the last war many of its industries, including its means of transportation, were being used almost, or actually, to their capacity; and if an industry already is utilizing, for example, 90 per cent of its capacity, it cannot increase its output more than about 10 per cent until it has enlarged its plant. On the other hand, if an industry is working to, say, only 70 per cent of capacity, it can increase its output about 30 per cent before expanding its facilities.

Now, many of our industries did have much more surplus capacity when we started our defense program a year ago than they had when this country entered the war in 1917. Hence, they could increase their output relatively much more in a short time than they could in 1917; and they have been doing so. But some of the most important industries producing especially for defense already have approached or actually reached the limit of their present capacity; and apparently this will decelerate the increase of defense production, and consequently the increase of traffic, until the capacities of some industries can be increased.

### Strikes in Industry Complicate Railroads' Problem

It seems very doubtful, therefore, whether during the remainder of this year the increase of the country's total production, and consequently of its traffic, will continue to accelerate. It seems much more probable that the total demand for freight cars will continue on a level during the rest of 1941 not more than about 25 per cent higher than in 1940. If this should be the case the railways probably will be able to handle the peak freight traffic next fall without serious shortages of equipment—**provided** there are meantime no more great fluctuations of production such as that caused by the coal strike.

This is a proviso of very great importance. The coal

strike within a few weeks prevented the production and loading of about 600,000 carloads of coal that otherwise would have been moved. The task of loading and moving this additional traffic will have to be performed during the summer months if none of it is to be added to the task of loading and moving next fall a peak load which, in any event, will be the largest in eleven years. Strikes in other large industries between now and fall would, if settled before fall, similarly curtail the increase of traffic in the summer months when the railways could easily handle it, and increase the demands upon them in the fall when they normally have the most traffic to handle.

### Probable Peak Load of 1941

We have indicated the railways will be able to handle the peak load next fall without serious shortages of equipment if it exceeds the peak load of 1940 by only about 25 per cent. This would make next fall's peak load approximately 1,050,000 carloads weekly. Apparently the best record ever made is that of loading one car weekly for each 1.85 cars in good condition available. This, of course, is equivalent to saying the railways have heretofore required a minimum of 1,850,000 cars in good condition to enable them to load 1 million cars in a week. On April 1, 1941, they had on line 1,827,000 cars (including private cars). Of these, almost 103,000 were awaiting repairs, leaving about 1,724,000 in good condition. If they could before fall acquire 50,000 new cars and put in good condition 50,000 of those in bad order on April 1 they would apparently have just about enough in good condition to handle a weekly peak load of 1 million cars. But obviously it would be a tight squeeze. Two things, at least, are essential to insure an adequate supply of equipment next October. One is the production meantime of all the equipment—both locomotives and freight cars—now on order; the other, the most efficient possible use of the available supply.

### Government Cooperation Regarding Priorities

In order that all the equipment now on order may be produced before next fall, it is essential that the equipment building companies and railways building equipment in their own shops shall be furnished all the materials necessary for this purpose; and in order that this may be done they will have to be placed high enough on the government's priority list for materials. The Association of American Railroads has furnished to those in charge of priorities for the government an elaborate statement, which is summarized in an article elsewhere in this issue, showing the quantities of materials for which priorities should be given to the railways themselves and to railway equipment and supply manufacturers to make practicable the production of both the equipment and materials that the railways will require this year; and apparently they will be given the needed priorities.

However, even if all the equipment and materials on



this priority list should be supplied on schedule, it will be essential throughout the rest of the year for the most efficient possible use to be made of all available equipment.

To this end the railroads will need the unstinted co-operation of both shippers and the government. They will need to have shippers load all cars as heavily as practicable, load and unload them as expeditiously as practicable and refrain from ordering any more cars than required to meet their immediate necessities. They will require also co-operation from both shippers and government in increasing the number of days a week that cars are loaded and unloaded. In many industries a five-day work-week is in effect; which means, of course, that these industries load and unload cars only five days a week. Increase of their loading and unload to at least six days a week would substantially increase the average daily movement of cars. And nothing else could contribute so much toward prevention of a car shortage as (1) increasing the average loading of cars and (2) increasing their average daily movement.

The average daily movement of cars in 1929 was 32.3 miles. This had been increased in 1940 to 34.9. But in October, 1939, it was 38.1 and in October, 1940, it was almost 39. No doubt by reasonable efforts by both railways and shippers it could be increased to an average of 40 miles during the rest of the year and to 45 miles during the fall peak movement of traffic. A daily movement of 45 miles would be only 15 per cent more than was attained during October, 1940, and yet, other things being equal, it would be equivalent to an increase of about 200,000 in the number of freight cars on line last October. Equipment is the critical factor in the equation. If there is no shortage of equipment next fall the railways will have no difficulty in handling the traffic offered them; for apparently the peak load will not much exceed a million cars a week, and in the falls of both 1926 and 1929 they handled peak

loads exceeding 1,200,000 cars without any congestion or unusual delays.

### The Estimates for 1942 and 1943

The estimates of the Association of American Railroads regarding freight loadings in 1942 and 1943, and the increases in freight cars they will necessitate, are highly interesting and raise some interesting questions. Total loadings in 1926 exceeding 53 million cars have never since been equaled. Loadings in 1929 were slightly less than 53 million, and in 1930 slightly less than 46 million. The loadings predicted for 1942, therefore, would be slightly smaller and those predicted for 1943 slightly larger than those of 1930. In 1930 the railroads owned over 2,300,000 freight cars. They now own about 1,650,000, and apparently by the end of 1941 will own about 1,700,000. The contemplated increases in railroad ownership would make the figure about 1,820,000 in 1942 and about 1,970,000 in 1943—approximately 350,000 less than in 1930. But these figures take no account of the increase in privately-owned cars since 1930. Furthermore, even at the peak of traffic in 1930 there were 396,000 surplus cars and 157,000 in bad order—a total of 553,000 that were not used. Apparently the number actually used, including private cars, in handling the peak load was about 1,825,000. It would appear, therefore, that the program of increasing railroad freight car ownership is quite adequate, provided the estimated increases in traffic are not greatly exceeded and sufficient additional locomotive power is acquired, which apparently, as figures already given indicate, will be done.

There were proposals emanating from government sources not long since that the railroads should acquire more equipment than they are now acquiring and plan to acquire. And there has been some criticism from the same sources because they did not immediately rush into the market and order 500,000 freight cars, and

### A Canadian View on Truck Competition

If highway carriers could handle all the traffic in the areas in which they operate, at a cost cheaper than rail costs, the solution of the problem would be very easy—turn over all the traffic to the trucks and abandon the railways. I have done a little calculating as to the possibility of all land transport in Canada being provided by highway; I find that it would require that every wage earner in the Dominion would be engaged in providing the transport facilities. There would be no one left to produce the goods to be moved.

One of the principal arguments used by the truckers in securing traffic all through the depression was the extra employment provided by the use of trucks as compared with the employees required by the railways to move the same traffic.

Perhaps the best example of relative costs of the two forms of transport lies in the fact that if the railways were to abandon their present rate principle of charging what the traffic can afford to pay, and substitute the flat rate of 1 cent a ton mile on all traffic, every over-the-road truck

in the Dominion would go out of business. They could not exist on a revenue of 1 cent a ton per mile.

I have never been able to follow this principle of setting truck rates at rail levels. Truck costs and rail costs are radically different. The rail rate structure is not based on the cost of moving each commodity but on what each traffic can afford to pay. Consequently the adoption of rail scale by trucks can only result in a raid by the trucker on the higher-rated traffic, leaving the lower-rated for the railways to move.

What should the basis of regulation be? We know that generally the truck is the economic carrier in the short-haul field while the railway is the cheaper carrier in the long-haul. This is due to the relatively high cost by the railways in terminal movements and cheap cost for road movements. The truck has the advantage in terminal movements and the disadvantage in moving the traffic over the road. With this fundamental difference in ability to move traffic, as a background, it would seem that regulation designed toward the utilization of each transport agency in its economic field would be in order.



locomotives and materials in proportion. These proposals and criticisms from those who, without having had any practical experience, merely theorize regarding

the railroad industry's needs, in ignorance of its past and potential increases of efficiency, appear thus far to have been entirely unwarranted.

## Myopia vs. Magnanimity

It is the dilemma of modern business life that the complexity of our productive system has made us a nation of specialists at a time when there is the greatest need to see things as a whole. The American Trucking Association has been awarded a plaque for its success in securing legislation favorable, in its own (possibly short-sighted) estimation, to the trucking business—although no one can say with assurance that the legislation thus attained has not injured the national interest in an all-round economical transportation system more than it has fostered such interest. Particularistic success, especially where politics are involved, does not necessarily promote the general welfare and hence is not necessarily praiseworthy.

The primary interest to be served by transportation is that of the general consuming public. Before the advent of motor transport, land transportation was largely performed by common carrier railroads which were required to serve all who wanted to ship and to accord all shippers equality of treatment. The railroads are still required by law to do this. From the standpoint of the public interest and sound economics, when the motor truck entered the scene it should have been permitted\* to replace rail transport only in those places and to the extent that its lower costs, greater speed and flexibility and individual service were an improvement over what the railroads had the ability to offer. But specialists were unable to see the picture as a whole, or for a long term of years. And the new instrumentality was not directed to the places where it would do the public the most good; instead it went everywhere where there was a quick dollar to be got.

The failure to put this new form of transportation into its proper niche arises from several causes, mainly *political* in nature, among which may be cited:

1. The continuation by the railroads of a system of *ad valorem* charges, inaugurated long before the advent of motor transport, which largely fails to recognize the transportation characteristics of the commodities being shipped.
2. Slowness of the railroads, shippers and for-hire truckers to recognize the proper economic radius and function of each form of transportation and the failure of legislative and regulatory authority to require such recognition, in the national interest.

From the standpoint of *national interest* in economical transportation, your observer inclines to the opinion that motor transportation service should be divided into two classes, viz:

(a) For-hire motor transport which is capable of effecting economy in, or giving superior service to, commerce. This class should be licensed and obliged to serve all alike who require its services; and not be permitted to limit its operations to the traffic it prefers, nor to selected cities along the route it traverses. This classification should embrace all for-hire motor transport handling traffic which may be moved in ordinary equipment over established routes, regardless of whether it is now classified as common or contract carriage.

(b) Specialized motor transport service required for traffic which cannot economically and efficiently be moved in ordinary motor equipment and service. All this class of transportation should be required to show convenience and necessity, and be licensed regardless of the commodity being transported, or whether the shipper elects to use his own vehicles or contract with another to do the job.

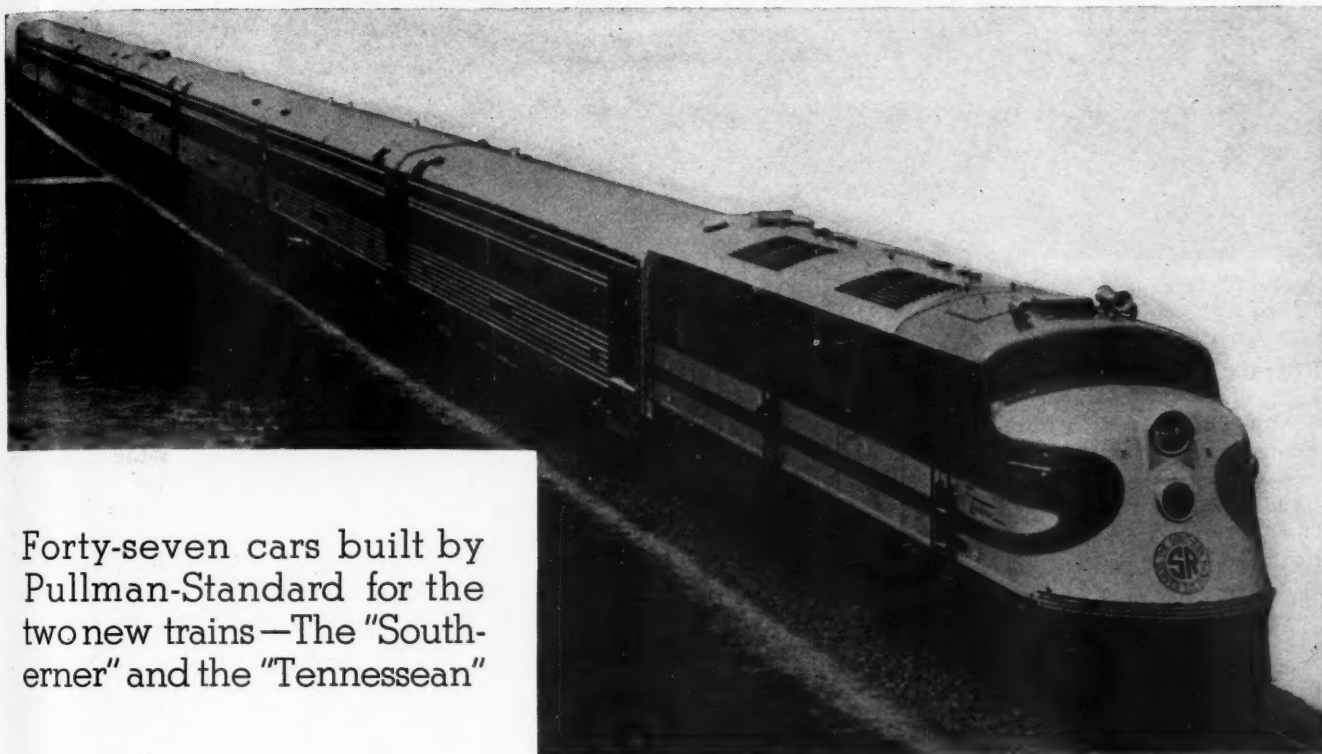
There are many among the rail and motor common carriers who advocate that industry be prohibited from transporting its own goods, or making private contracts with others for such transportation. It may reasonably be suspected that some of these carriers may wish to restore the *ad valorem* conception of rate making, thus re-establishing the monopoly situation in transportation—and perhaps incidentally depriving the public of better and more economical service. There are, also, a few industries advocating such restriction because rates which recognize competition disturb their marketing arrangements. They overlook the threat to free enterprise in thus leaning too heavily on the coercive power of government.

There is a more statesmanlike and moderate (and more *wholesome*, in the literal meaning of the word) group of short-haul motor common carriers, railroads, shippers, legislators and federal and state regulatory officers who would favor the classification and regulation advocated in (a) and (b) above, if assurance could be given: That each form of transportation would be permitted to enjoy the traffic to which its superior economy and ability to give service (i. e., "inherent advantages") entitled it; and that there would ensue a soundly co-ordinated, economical system of national transportation, with private ownership not only recognized in principle but made certain by giving necessary transportation agencies a chance to earn a legitimate profit.

There are many able men in the transportation business—on both the managerial and the regulatory side—expert in holding for individual carriers their "share" of the traffic (or more than their share); or, on the regulatory side, expert in preventing malfeasance (perhaps by discouraging any kind of "feasance"). But how many people are there who see the present dangerous transportation situation from the standpoint of the country as a whole; or from that of private business as a whole; or even from that of the transportation business as a whole? Present piecemeal policies are undermining the transportation industry just as surely as they are endangering the whole private enterprise system—and neglecting the *national interest* in economical and dependable transportation.

\* It is to be noted that government "intervention" in highway transportation does not constitute interference with private business, because government, by providing the highways, is already the senior partner in highway transportation. The "intervention" occurs, not when the use of highways is supervised, but when the highways are built in the first place. For the government to control the use of its own property in a manner to preserve the orderly and efficient functioning of the economy is requisite, not contrary, to the observance of free enterprise principles.

# Deluxe Coach Trains Added to Service on the Southern



The Southerner

Forty-seven cars built by Pullman-Standard for the two new trains—The "Southerner" and the "Tennessean"

**T**HE Southern is adding two deluxe coach trains, the "Southerner" and the "Tennessean," to its service between the Atlantic seaboard and the South. The "Southerner" began operation on March 31 between New York and New Orleans, La., running over the Pennsylvania's electrified lines between New York and Washington, D. C., while the "Tennessean," now making a pre-service exhibition run, will be placed in service between Washington and Memphis, Tenn., on or about May 15. South of Washington, the "Southerner" is powered by 2,000-hp. Diesel-electric locomotives and south of Bristol, Va., the "Tennessean" will be powered by 4,000-hp. Diesel-electric locomotives. These locomotives were built by the Electro-Motive Corporation.

The 47 streamlined cars built by the Pullman-Standard Car Manufacturing Company for the new coach trains include the following: six mail-baggage cars, six baggage-dormitory-chair cars, six partition chair cars, fifteen chair cars, three Pennsylvania-type chair cars, five dining cars, three lounge-tavern-observation cars with curved ends and three lounge-tavern-observation cars with straight ends. To meet the requirements of the territory in which these trains operate, the rear part of the baggage-dormitory-chair cars seats 22 colored persons and the forward half of the partition chair cars seats 26 colored persons, the remaining half seating 26 white persons. The seating capacity of the chair cars is 56; the dining cars accommodate 48 persons. All of the cars have a coupled length of 85 ft.

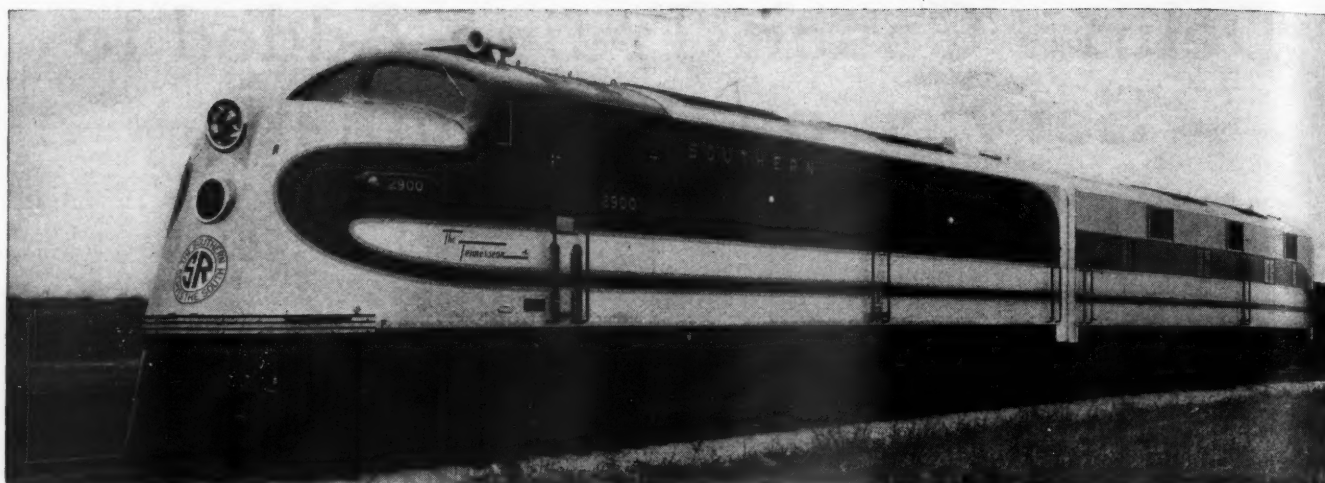
The structural framing is low-alloy high-tensile steel

of welded truss construction designed to meet A. A. R. requirements. The exterior sheathing is of stainless steel. The area between the belt rail and the lower letterboard rail is composed of  $\frac{1}{4}$ -in. metal-covered plywood having stainless steel on the outside and Galvannealed steel on the inner side; fluted panels of stainless steel cover the space between belt rails and the side sills. The skirts below the side sills are of corrugated stainless steel and have hinged sections for access to batteries and other parts requiring servicing. The roof sheets are of stainless steel with alloy-steel stiffeners on the underside to prevent distortion or buckling after the seams are welded.

All of the cars except the six mail-baggage cars have a sub-floor of galvanized steel riveted to the top of the underframe members with metal spark shields applied over the wheels. Instead of galvanized steel, aluminum alloy is used in the sub-floor of the mail-baggage cars. Baggage compartments in the mail-baggage cars have double floors of yellow pine laid over the sub-floors.

In the passenger compartments the builder's arch-type flooring of galvanized steel is laid on stringers over the sub-floor. Flexolith flooring composition is applied over the top of the corrugations and a sealing coat of Tuco floor dressing is applied to the top of all composition flooring, over which linoleum or rubber is laid. Floor composition is applied level with the top of the arched flooring in the kitchens and pantries and is covered with cork board. Monel metal forms a one-piece pan over the entire floor with maple racks covering the walking space. The floor of the three Pennsylvania-type chair cars varies





One of the Electro-Motive Locomotives for The Tennessean

from the others only by the installation of an emergency exit.

Stonefelt is used to insulate all cars except the three Pennsylvania-type chair cars, the insulation consisting of one 2-in. layer in the floors and ends and one 3-in. layer in the sides and roofs. The Pennsylvania-type chair cars have the same thicknesses of insulation but the material is Fiberglas.

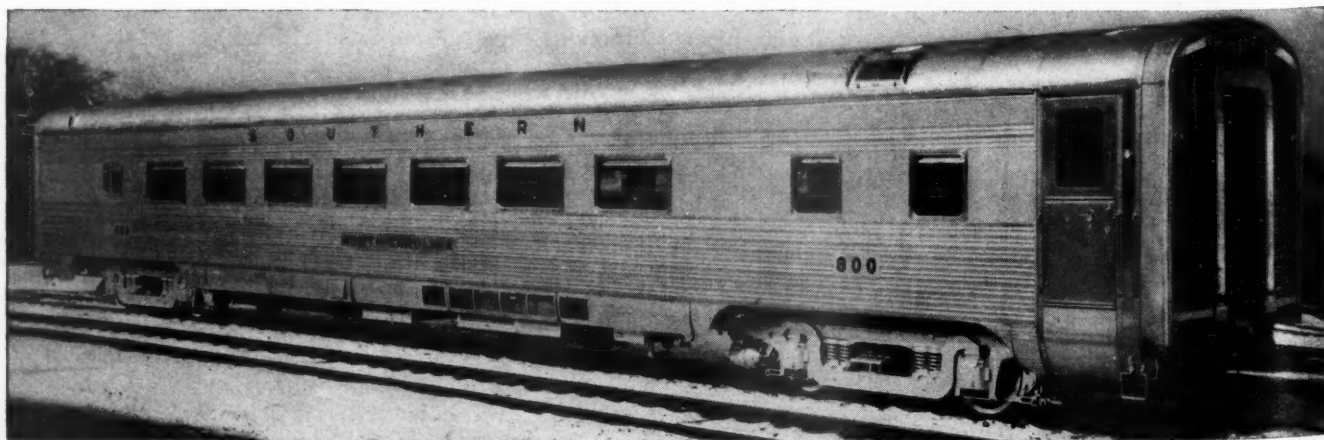
Miner draft gears and buffers, the latter including side-stem springs at all car ends except at the rear of the curved-end observation cars, are installed in all except the three Pennsylvania-type cars. The latter have a balanced twin group of Waughmats at each end under an initial compression of 7,000 lb. A. A. R. tight-lock couplers are used at all locations except the rear of the lounge-tavern-observation cars which have Type E.

Each car is fitted with center and outer diaphragms except the rear of the lounge-tavern-observation cars. The rear of the straight-end observation cars have a center diaphragm only; the curved-end observation cars have none. The center diaphragms are two-fold canvas type in aluminum color. The outer diaphragms are of pigmented rubber, also in aluminum color, and are shaped to the same general contour as the car exterior. All vestibule steps pivot into the car body when not in use; the car skirting is continuous with the steps in raised position.

The side and end walls of the baggage compartments are lined inside with corrugated, galvanized steel; the

ceilings are of aluminum. Side and end walls in the mail compartments are lined with flat open-hearth steel, the ceiling lining being the same as in the baggage compartments. The passageway partition in the baggage-dormitory-chair cars and the dormitory have an interior finish of steel construction with shower rooms lined with Monel metal. Except for the Pennsylvania-type chair cars, the passenger-carrying cars have wainscoting of tempered Presdwood, pier panels of steel, frieze panels of tempered Presdwood (steel used at the basket racks) and end finish of steel. The wainscoting, pier panels, curtain guides, frieze panels and end finish in the three Pennsylvania-type chair cars are of steel. Partitions in the passenger-carrying cars are of ½-in. Galvannealed-covered plywood except for the kitchen and pantry passageway partition which is of single-sheet reinforced aluminum construction.

The ceilings are finished with aluminum. Center air ducts of aluminum are built into the decks between the headlining and the roof. The heater-pipe guards, except in the baggage compartments, are stainless steel. Snap-on type steel moldings and window capping of blister-proof Formica are used. Stationary single-glazed side sash with Prism glass in O. M. Edwards extruded-aluminum frames are applied to the kitchens and pantries. The other side windows are equipped with O. M. Edwards double-glazed sash. There are, however, four emergency escape windows on each side of the three Pennsylvania type chair cars. The luggage racks in the chair compartments of these cars are the



One of the Chair Cars for The Southerner and The Tennessean Trains of the Southern Railway



Pennsylvania standard type; all other cars have the built-in continuous type.

### Air Conditioning and Electrical Equipment

Air conditioning is installed in all except the six mail-baggage cars. Thirty-eight of the cars have the Safety Car Heating and Lighting Company's steam-jet system; the three Pennsylvania type cars have the Frigidaire eight-ton electro-mechanical system. The Safety air-conditioning equipment is of six-ton capacity in the dining and baggage-dormitory-chair cars and seven tons capacity in the remaining cars. The Vapor steam-heating system with copper-fin radiation and thermostat control is used in all cars except the three Pennsylvania type cars which have the Fulton-Sylphon system of control.

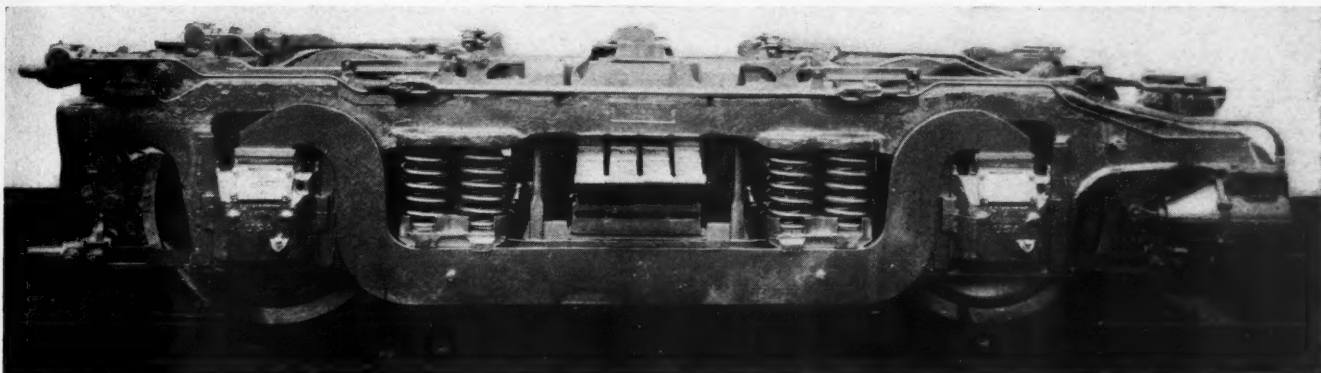
The electrical system operates on 32 volts, d. c., supplied by Safety 10-kw. 40-volt equipment on all but the three Pennsylvania type cars. Two 10-kw. generators, each driven by a separate truck, are on the lounge-observation cars. The cars with Safety generators have 16-cell Exide batteries of 750-amp.-hr. capacity and 32 volts, in the baggage-dormitory chair, partition chair and

Under the rear of each lounge-tavern-observation car is a Pneuphonic warning horn.

All cars are equipped with General Steel Castings four-wheel trucks having a 9-ft. wheel base. The trucks have cast-nickel-steel frames with integral pedestals and double equalizers. The equipment includes Hyatt roller bearings, Houde shock absorbers, Simplex clasp brakes and Edgewater multiple-wear wheels. In addition to lateral shock absorbers, the rear trucks on the observation cars have roll stabilizers. The bolster chafe plates, bolster and equalizer spring seats and the truck-frame transoms are cushioned with Fabreeka. Side bearings are the Stucki single-roller-type bolted to the bolsters.

### Interior Arrangements and Decorations

Floor plans of passenger-carrying cars are shown in the accompanying drawings. These drawings do not include the floor plans of the three Pennsylvania type chair cars, the three straight-end observation-lounge-tavern cars, or the six mail-baggage cars. However, the general interior of the Pennsylvania type chair cars is like with that of the chair car shown and the only



The Four-Wheel Truck Has Commonwealth Frames and Hyatt Roller Bearings

chair cars, 1,000 amp.-hr. capacity in the dining and lounge-tavern-observation cars and of 350 amp.-hr. capacity in the mail-baggage cars. Each Pennsylvania-type chair car has a General Electric 20-kw. generator with Spicer drive and safety clutch and an Exide battery with 1,250-amp.-hr. capacity at 8-hr. rating.

Lighting fixtures in the baggage-dormitory-chair cars are predominantly of the Safety type, inside frosted and operating on 30-volt electric current. The vestibule and electric locker ceiling lights are supplied by Pullman-Standard and the overhead air-conditioning-unit inspection light by Crouse-Hinds.

Fluorescent lights of the Safety type are installed in the center ceiling, ceiling ends and for soffit lights over the windows in all dining rooms, these light tubes being 1½ in. in diameter by 24 in. long, operating on 110 to 125 volts alternating current and taking either 15 or 20 watts.

General illumination in the observation-lounge-tavern cars is supplied by fluorescent lights of the type described; those in the bar ceiling and back of the bar are of Pullman-Standard manufacture.

### Trucks and Brake Equipment

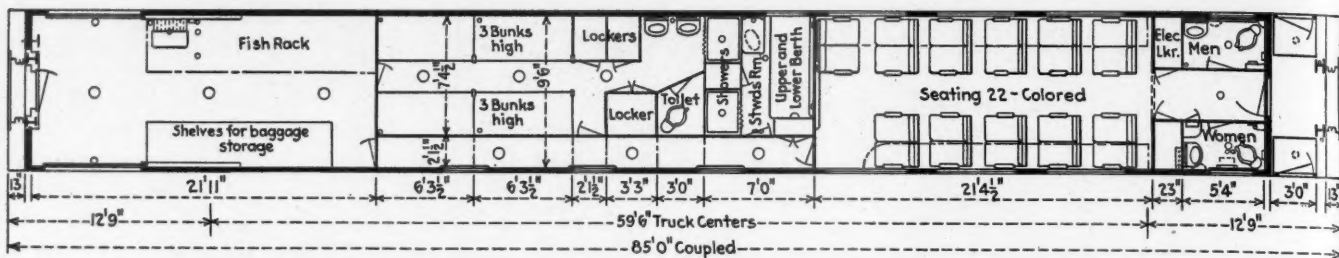
Air-brake equipment is Westinghouse Schedule HSC with full electro-pneumatic features with speed-governor control on the head and rear cars only of each train.

difference between the straight-end and curved-end observation-lounge-tavern cars is the relocation of seats in the observation ends to conform to the change in end contour.

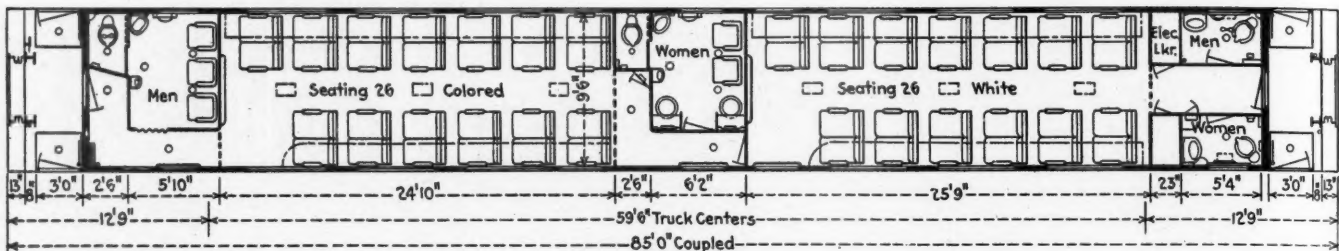
The chair cars are furnished with twin rotating reclining seats of the Transportation Seat Company's manufacture. These seats have steel aisle pedestals, aluminum end arm rests, and folding center arms. They are also equipped with individual sliding rubber cushions, spring back cushions, and adjustable stainless-steel foot rests. The one bulkhead seat in each of the baggage-dormitory chair and partition chair cars is of the same design but does not revolve or have foot rests. Individual chairs and settees in all of the cars were supplied by the General Fireproofing Company.

### THE CHAIR CARS

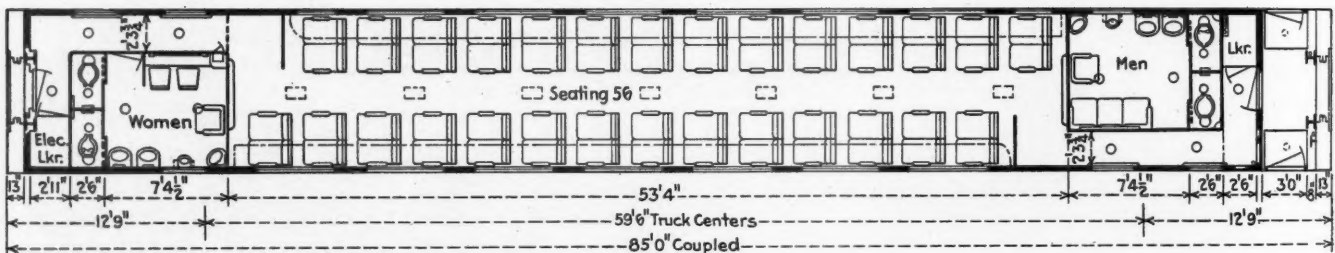
The interior decorations for the cars are in pastel shades. Ten of the fifteen chair cars have a pastel blue color scheme. The ceiling color, light blue, runs between side-plate mouldings and is applied to the ceiling mouldings and throughout the ceiling area on everything except the center lighting fixtures. Medium blue is used for the wall area, including the luggage racks, and extends from the heater-pipe grilles to and including the side-plate moulding; the front nosing of the luggage racks is left in satin-finish aluminum. The bulkheads,



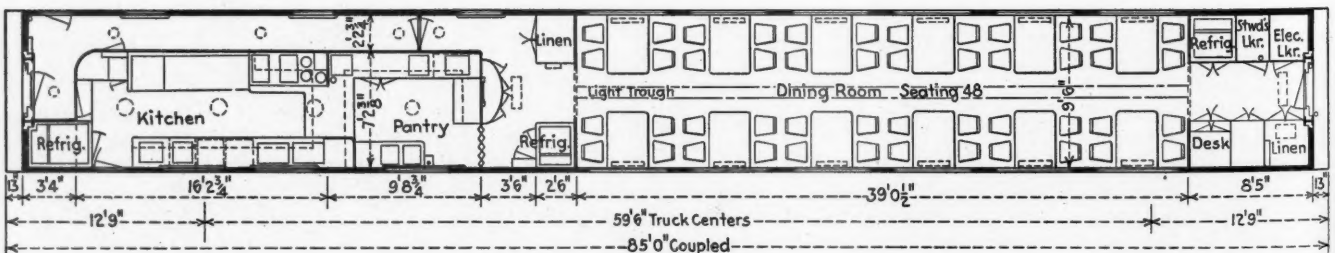
The Baggage-Dormitory-Chair Car—A Steward's Room and Four Three-Tier Bunks Are Included in the Dormitory Section



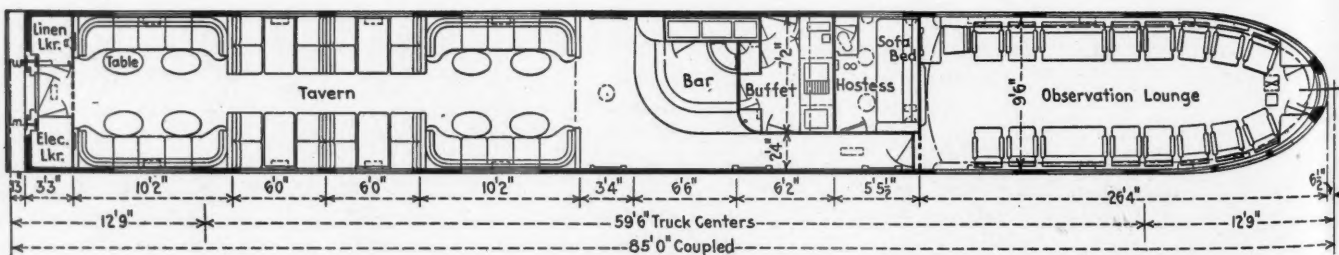
The Partition Chair Car Is Arranged in Two Sections with Separate Toilet Facilities



The Floor Plan of the Chair Cars, Including the Three Pennsylvania-Type Cars



The Dining Car Accommodates 48 Persons



The Observation-Lounge-Tavern Car with Curved End—Except for the End Contour, the Straight-End Cars Have a Similar Arrangement



except mural display cabinets, including adjoining passageway partitions and the window sides of passageways, are also in medium blue. Dark blue is used for the inner side of the end doors and the outside of locker and room entrance doors.

In the main compartment the seats are upholstered in blue needlepoint. The floors are covered with blue Marbelle linoleum. Under the seats the color is light blue and the center portion of the aisle strip is dark blue. Light tan stripes outline the aisle strip. The dark blue is continued in the passageways at both ends of the cars. Window shades in the main compartment and passageways are in gold. The outsides of the shades throughout the train are pebble grain aluminum.

Mural display cabinets at the ends of the main passenger compartments have a stainless-steel base up to the height of the heating-pipe grille and Snap-On mouldings of satin finish; the balance of the cabinet base and the canopies are in dark blue with the capping section matching the blue of the window capping. The photo murals are in gold tones. The grille on the low partition in front of the passageway at either end of the main compartment is colored safety glass.

Both the men's and women's rooms are finished in three shades of beige. The floors are covered with gold Marbelle linoleum. Top-grain blue leather is used to upholster the settee and lounge chair in the men's room. The vanity chairs in the women's room is in copper-colored needlepoint; the lounge chair, in blue needlepoint. Window shades in the men's and women's rooms, are blue.

The other five of the fifteen chair cars have a beige color scheme with light ceilings, medium walls and dark base. Color distribution in these cars is similar to that specified for the blue color scheme. Three tones of blue are used in the men's and women's rooms. In the main passenger section, the seats are upholstered in copper-colored needlepoint. The Marbelle linoleum is light blue under the seats and gold in the aisle. These colors are separated by light tan stripes. The window shades are blue. The settee and lounge chair in the men's room are finished in top-grain tan leather. Blue fabric is used for the vanity chairs and copper-colored needlepoint for the lounge chairs in the women's room. The linoleum floor is dark blue.

Two of the three Pennsylvania type chair cars are

decorated in the blue color scheme used in the group of ten chair cars; the remaining car has the beige color scheme applied to the group of five chair cars. The only variation is in leaving the aluminum baggage racks and the stainless-steel inserts in the frieze in satin finish.

#### PARTITION CHAIR CARS

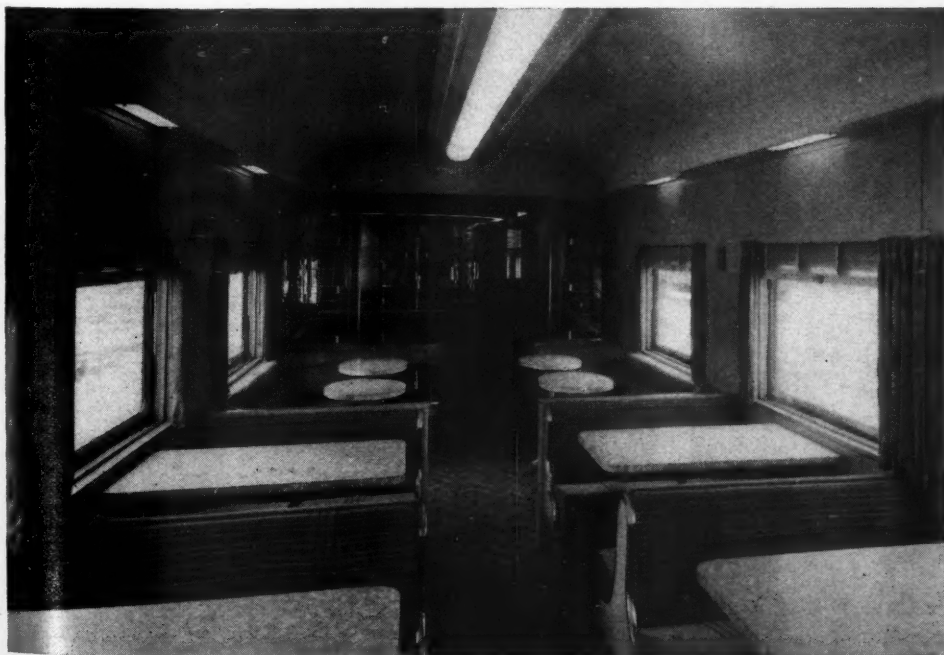
These six cars have the beige color scheme and furnishings used in the interior treatment of the group of five chair cars. All partitions are in medium beige; all doors, dark beige. The men's and women's lavatories in the white section and the men's and women's rooms in the colored section are in blue.

#### BAGGAGE-DORMITORY-CHAIR CARS

The baggage compartments have dark gray on the



The 56-Passenger Chair Car



The Tavern Section  
of the Tavern-Lounge-  
Observation Car



floors, light gray on the walls up to the eaves, white on the ceiling, and black for the iron work and metal trim. The forward passageway and the crew's quarters have a base color of dark blue, walls of medium blue, and ceilings of light blue. The beige color scheme is used in the steward's room.

The passenger section has the blue color scheme used in the group of ten chair cars. Color distribution for the partitions, passageway, and bulkhead is similar to that used in the partition chair cars.

#### DINING CARS

A green color scheme is applied to the five dining cars; the ceilings are in light green, walls in medium green, and the base in dark green. The ceiling color runs between side-plate moldings and includes the lighting soffits at either side and the frames of the lighting fixtures at the lighting soffits and metal portions of the ceiling fluorescent structure. Medium green is applied to the walls between the side-plate molding and the top of the heater-pipe grilles. The lower portions of the bulkhead partitions at the ends of the dining room are painted in dark green to the same height as the heater-pipe grille. The window capping is green Formica. The photo murals on the partitions are in gold. The dining-room carpet is in green; the chairs are upholstered in gold needlepoint. Draperies are in green and gold. The Venetian blinds are painted light green.

The buffet in the foyer between the kitchen and dining room is finished in faux satin. Both the dining-table tops and the buffet top are of Formica. A round mirror above the buffet is in gold and is fastened with plastic rosettes.

The walls and ceilings of the passageways at both ends of the car are finished in the beige color scheme. The floor coverings are of gold Marbelle linoleum and the window shades blue.

#### OBSERVATION-LOUNGE-TAVERN CARS

The tavern sections of these cars are decorated in the same green color scheme that is employed in the dining cars. At the forward end of the car, medium green is applied to the walls and inside of the end door, light

green to the ceiling, and dark green to the trim of the passageway. The curved lounge seats in the tavern section and the pedestals of the tables at these seats are covered with tan leather with the welt lines at the back and front of the seats in cream-colored leather. Formica is used for the table tops. The seats in the four card sections occupying the central part of the tavern room are upholstered in green cloth. A green carpet, the same as that in the dining room, covers the floor in the tavern section.

Panels of safety glass with a gold design separate the tavern and bar sections. The ceiling of the bar section is in light gold. Individual oblong blocks of binder board covered with Rocoteen in cafe-au-lait are applied to the side walls of the passageway and to the front end of the



Curved-End Tavern-Lounge-Observation Car



The Observation Section of the Tavern - Lounge-Observation Cars





# Railroads Face Grave Emergency\*

Size and scope unpredictable because of many variables—Will demand unusual effort

By Ralph Budd

Transportation Commissioner, Advisory Commission  
to the Council of National Defense

**S**INCE the present war broke out in Europe almost two years ago there has been a sharp increase in industrial activity and traffic in the United States. The immediate stimulus was the demand for materials and supplies for use in the war abroad. Soon that was augmented by buying to build up inventories here at home, and then by our preparedness program which was launched about a year ago. Transportation at once felt the effect of this sudden revival of business. Export tonnage other than grain handled through the Atlantic and Gulf ports reached a total almost equal to the peak of outbound traffic during the World War and has so continued. The reverse of the general trend has been the case with traffic in products of agriculture, exports of which diminished almost to the vanishing point when Norway and the Low Countries, and finally France, were overrun by German armies.

The number of freight cars loaded is one of the best indices of business in this country, even though the railroads now handle only about two-thirds of the total traffic. In 1939, due in part to the effect of the European war, carloadings increased 3,454,000 over 1938 to a total of 33,912,000. A further increase of 2,442,000 in 1940 brought the total to 36,354,000 or an average of almost 100,000 a day. In 1941 daily carloadings are estimated to average about 112,000. These averages include increases in some commodities and decreases in others; increases in some regions and decreases in others; high loadings during some weeks of the year, and relatively low loadings in other periods. The components are exceedingly numerous and varied, comprising as they do everything that is grown, mined, or manufactured, and moved in commerce.

## Coal Strike Causes Trouble

Coal contributes more tonnage than any other single commodity. It is so great that a substantial increase or decrease in coal shipments markedly deflects the graph of total freight carloadings. Full production followed by virtual suspension can result in such a wide swing as the following: The week of March 29, 1941, reported total carloadings, all commodities, of 792,125, or 26 per cent above the corresponding week in 1940, but two weeks later the total was 679,808, or only 10 per cent above 1940.

Since the job of common carriers is to move goods and people from where they are to where they want to be, and to do so promptly in any desired quantity at any time, they should be ready always to take care of peak requirements. Nevertheless, in times like these it is very helpful to maintain as uniform a flow of traffic as possible, and unfortunate when anything interrupts such regular movement as has happened during the past month. About forty days coal supply had been built up

in advance of April 1—some plants had less than that. Now the supply is short. During the next six months railroads, ships, barges, and trucks will have to take on the extra burden of hauling perhaps as much as 35 million tons of coal that was not mined during April, when thousands of coal cars and many locomotives were idle. More than 600,000 carloads will be piled on top of the seasonally rising volume, which means that a higher peak movement will be handled during the heavy traffic period than would have been necessary otherwise. Unless this and other interruptions reduce the industrial requirements for coal this year's bituminous production will be upwards of 500,000,000 tons, or about 12 per cent above that of 1940. Output was slightly above 134,000,000 tons in the first quarter of 1941.

Unlike former periods of brisk business, there are now several forms of transport, each of which carries part of the whole load. As a consequence railway traffic and employment have declined greatly since 1929, although the total freight and passenger movement by all methods has increased substantially. The burden of moving freight divides about as follows: railways 65 per cent, highways 8 per cent, Great Lakes 13 per cent, other inland waterways 3 per cent, pipe lines 11 per cent, and airways a fraction of one per cent (but an important and increasing traffic). Of all passenger travel, 90 per cent is in private automobiles; 5 per cent on railways; about the same on buses, and one-half of 1 per cent in airplanes. I suspect that coal operators will recognize a similarity between this situation and their own. Total power consumption of the country has increased, but coal consumption has not increased because it supplies a lesser part of the total power requirements than formerly and shares the field with gas, oil, and water power.

In recent addresses I have called attention to the fact that for some years the transportation plant has been too large for the needs of the country. Also, that there is no way of determining just how great the surplus had become, for during the past decade while some forms of transport still have been in the expansion stage, the total volume of traffic has been smaller than what should be considered normal.

## Wide Fluctuations in Traffic

The year of greatest rail passenger travel was in 1920, when it amounted to approximately 47 billion passenger miles. The low point was 16½ billion in 1933. In 1940 it amounted to nearly 24 billion, or about half as much as in 1920. The high marks in railway freight were recorded in 1926 and 1929. In each of those years about 53 million carloads were handled. The low point was in 1932, when the volume was little more than half of 1929. In 1940 the railways handled 36½ million carloads, or 68½ per cent as much freight as they did in their best year.

In general, transportation for national defense is not

\* Address before The American Mining Congress, Cincinnati, Ohio, May 1, 1941.



unlike that for ordinary commerce; cars loaded with materials for peace and for war move in the same trains; the same car, truck or vessel may be loaded with war materials in one direction and peace materials in the other. The same pipe lines handle oil and gas for defense and for commercial uses. The similarity of service extends to the handling of passengers, whether it be by land or by air. The adaptability and elasticity of transportation facilities thus are in marked contrast with the special and often single purpose of a manufacturing plant. Also, transportation for defense is spread over the time consumed in the successive periods, first of construction, then of production, and in many instances, such as the building of cantonments and munition plants, the daily transportation load is greater during the period of construction than it is after their completion.

### "How Much Traffic Are We to Handle?"

The question naturally arises whether the transport agencies of the country will be able to provide, without interruption or limitation, all of the services that may be currently required. It is a question which has been much discussed almost constantly for the past year. I have said on more than one occasion that transportation people must answer the question in a typically Yankee way by asking another, "how much traffic are we to handle, and when and where are we to move the freight?"

It would seem rash to say that the railroads and other transportation agencies are equal to any and every conceivable task, or that they can handle all traffic that may be offered without knowing more of what its proportions may be. But if they can be kept informed a reasonable time in advance as to how much the volume will be increased, and by what kind of traffic, their performance of the past two years, together with new cars and locomotives and other improvements which have been made or are being made would give assurance of reliable and satisfactory service. Their ability in future to keep ahead of requirements must, of course, depend upon their knowing what traffic to prepare for, and also their being able to obtain new cars and locomotives and other essential materials as they will be needed. This is only a question of degree.

The railways always are large buyers of basic materials. In all of our important industrial activities there is an integration of the different functions which is somewhat like the synchronization of an assembly line in production. Take the case of steel—from the mining of ore to the fabrication of the finished product, each of the steps is geared to those before and after, and if the final output is to be stepped up there must be a corresponding increase in capacity all along the line. More ore will be mined, which will mean more rail transportation, more lake transportation, more furnaces, more rolling mills, and more factories.

### Costly Improvements Made

Commercial transportation facilities have been improved and enlarged during the past two years at a cost of about a billion and a half dollars as follows:

<b>Railways:</b>			
New Cars .....	111,000		
New locomotives .....	825		
Total Expenditures for construction and equipment....		\$800,000,000	
<b>Trucks:</b>			
New Units—(trucks and trailers) .....	221,000		
Cost in Dollars, including other facilities .....		250,000,000	
<b>Buses:</b>			
New Units .....	36,000		
Cost in Dollars, including other facilities .....		200,000,000	
<b>Pipe Lines:</b>			
Miles of pipe .....	58,000		
Cost in Dollars .....		50,000,000	

<b>Airplanes:</b>		
Units—About 7,000 (including private planes).....		50,000,000
Cost in Dollars .....		
<b>Waterways:</b>		
Ships, barges, tow boats, etc. ....		100,000,000
Cost in Dollars, About .....		
<b>TOTAL .....</b>		<b>\$1,450,000,000</b>

In addition vast sums have been spent by the federal, state, and local governments for highways, waterways, and airports—probably \$2,750,000,000 in all—while approximately \$5,200,000,000 have been spent for private automobiles and trucks. Moreover, orders for railway cars and locomotives now in the hands of builders are greater than they have been on any May 1 since 1929. Unless work is delayed by shortages of material or labor 100,000 new freight cars will be delivered during 1941.

### Estimates of Future Traffic

In order to inform the carrier managements of prospective service requirements the Advisory Commission to the Council of National Defense has made use of various studies, estimates, and forecasts of future traffic. Such studies will be continued and revised while the preparedness activity continues.

Early this year the Bureau of Research and Statistics, Advisory Commission to the Council of National Defense, analyzed the National Defense Program, giving weight to its effect on individual purchasing power, and taking into account export materials and supplies, chiefly for Great Britain. This analysis was carefully examined by the Bureau of Railway Economics in terms of railroad transportation, and the results translated into the equivalent carloads of revenue freight. Carloadings, rather than tons, were used as the unit of railroad freight service because they are the most current of railroad statistics and are the best single measure for gaging equipment requirements. The result was that it was estimated that 3,426,628 more carloads would be moved in 1941 than in 1940. This would be an increase of 9.4 per cent for the entire year.

These same two Bureaus will revise the estimates from time to time based on later information, and such a revision is now in process. Advance figures indicate that the carloadings for 1941 will be substantially more than 40 million. Should they be 41 million, it would mean an increase of 12½ per cent for the year. In that case the quarterly increases above 1940 would be:

First quarter, actual .....	14.8
Second quarter, estimated .....	12.9
Third quarter, estimated .....	12.5
Fourth quarter, estimated .....	10.1

The curve of total carloadings for the United States represents a combination of large increases in some commodities and regions, lesser increases in others, and decreases, large and small, in still others. Such a composite, since it consists of pluses and minuses, tends to level the extreme peak and valleys, but even so it is a jagged curve. For example, the loss in coal loading in April was partially concurrent with a gain in ore loading by reason of early opening of navigation on the Great Lakes. By April 27 of this year 5,377,482 long tons of ore were loaded into boats at Upper Lake ports, against 221,718 up to the corresponding date of 1940, a gain of 5,155,764 tons. While in the mass figure, this served to offset the loss in coal, the ore actually was handled with special equipment which is not used in coal traffic.

The ups and downs are well explained in a Review of Railway Operations prepared by Dr. Julius H. Parmelee, Director of the Bureau of Railway Economics, and published in the *Railway Age* of January 4, 1941, page 35. The plight of farmers and the decline in movement of products of agriculture which is contrary to the general upward trend has been explained in a recent address by

Agricultural Adjustment Administrator, R. M. Evans [who called attention to the decline in grain exports]. Cotton surpluses are plaguing the growers of that staple in somewhat similar fashion. On the other hand there exists or is anticipated, a need of more meat, poultry, eggs, butter, tallow, and some vegetables.

These statements illustrate how greatly the demands for production and employment vary in different groups and occupations, and also in different regions, especially since farming and live stock raising are virtually the only pursuits in some parts of the west. They also show how varied are the component parts of the nation's transportation load, for it reflects the complexity of the daily life of all the people.

### The Wheat Crop Problem

The problem of providing for an unforeseeable amount of transportation is presented in the movement of the 1941 wheat crop, the harvest of which will begin in the next thirty days. It seems quite certain that the crop will be large and there does not appear to be sufficient elevator space to receive it all at once. For several months the Defense Commission has had the matter under consideration with the Department of Agriculture. Some new storage is being added and some grain is being moved to the seaboard, but no one is certain how much unused capacity there will be in the interior. Growers are being encouraged to provide storage on farms for the excess grain above what will be moved to elevators and mills. Dealing with so many farmers, and with such elusive things as the yields on individual farms, it is simply impossible to know in advance whether such farm storage will fully meet the situation.

In the meantime, cars are being assembled for handling the crop, based on the best information available. More cars can be provided if it is found that more grain is to be moved than at first anticipated. If too many are assembled some of them will be moved away empty. This has happened in past years, but it is doubtful if so much uncertainty ever existed before. It is possible that with favorable weather, the total United States wheat crop may approach a billion bushels this year, so it is apparent that we are dealing with a problem of major proportions. An important thing from the National transportation point of view is that for grain, as for other shipments, an unloading place must be provided before cars are loaded so as to avoid tying up railroad equipment for storage purposes.

### Co-operation from Shippers

The handling of transportation during this period of National Preparedness will be greatly aided if all concerned will cooperate fully. The railways have suggested that shippers:

1. Give advance notice of requirements, but do not order cars placed for loading until commodities are ready to load.
2. Unload cars promptly on arrival and notify railroad when empty car is available.
3. Load cars to maximum journal carrying capacity or full visible capacity, whichever governs.
4. Remove all dunnage, blocking and rubbish from cars after unloading to permit immediate re-use and eliminate necessity of delay to cars for reconditioning.
5. In industries where 5-day work week is in effect some plan should be worked out to provide at least 6-day basis for loading and unloading cars.

Transportation is an integral part of production; its need may appear many times in the transition from raw

material to the finished product and any disturbance of the orderly rhythm affects transportation adversely as it does production itself.

## Railroads Need 5-Million Tons of Steel in 1941

**C**LASS I railroads and builders of railway equipment will require 4,914,556 net tons of new steel during 1941, according to estimates which have been made by the railroads and equipment builders and submitted to Edward R. Stettinius, Jr., director of priorities, office of production management, of the National Defense Council, by the A. A. R. This was an estimate as of May 1 and the priorities division now has the information needed by it for rationing the production of raw materials, if this becomes necessary to prevent interruptions in the railroad program.

The steel requirements of the railroads include 2,794,304 net tons of steel already on order and 2,120,252 net tons yet to be ordered. A total of 3,313,420 net tons is for direct delivery to the Class I railroads, of which

Table 1—Steel for Delivery to Class I Railroads Year, 1941\*

	On order N. T.	To be ordered N. T.	Total N. T.
Plates, shapes, bars, sheets, billets, etc...	661,227	307,412	968,639
Steel castings, incl. side frames, bolsters, etc.	110,001	112,358	222,359
Axles, forgings, incl. rolled steel wheels, etc.	141,640	100,684	242,324
Miscellaneous steel, incl. bolts, nuts, etc.	72,334	136,674	209,008
Rail	705,211	299,950	1,005,161
Track fastenings	338,059	170,112	508,171
Frogs, switches, guard rails, etc.	35,619	30,822	66,441
Steel for bridges, buildings, etc.	20,914	70,403	91,317
Total	2,085,005	1,228,415	3,313,420

\* Revised to May 1.

2,085,005 net tons are now on order and 1,228,415 net tons are yet to be ordered. The requirements of the car builders, according to their estimates of May 1, totaled 1,497,514 net tons, of which 685,721 net tons is on order and 811,793 net tons is to be ordered, while the locomotive builders will require 103,622 net tons of steel for railway work, of which 23,578 net tons is on order and 80,044 net tons is to be ordered. The estimated requirements of the car builders include steel for 13,400 cars

Table 2—Steel Required by Car Builders, Year 1941\*

	On order N. T.	To be ordered N. T.	Total N. T.
Plates, shapes, bars, sheets, billets, etc...	451,006	450,099	901,105
Steel castings, incl. side frames, bolsters, etc.	126,507	146,990	273,497
Axles, forgings, incl. rolled steel wheels, etc.	56,872	177,204	234,076
Miscellaneous steel, incl. bolts, nuts, etc.	51,336	37,500	88,836
Total	685,721	811,793	1,497,514

\* Material for 38,400 cars booked but not placed May 1.

which the railroads had not ordered up to May 1 but which are to be built by October 1, and 25,000 cars for which formal orders had not been received by the builders up to May 1 but which are to be built for delivery between October and December. Orders for 43,539 freight cars were placed prior to May 1.

The schedules prepared by the A. A. R. for the priorities division reported the tonnage of each class of steel required by each car builder and locomotive builder, while



the aggregate requirements of the Class I railroads listed the manufacturers and the tonnage of each class of steel each manufacturer is expected to furnish. The combined requirements of steel for rail transportation during 1941, as estimated by the railroads and the equipment

Table 3—Steel Required by Locomotive Builders, Year 1941

	On order N. T.	To be ordered N. T.	Total N. T.
Plates, shapes, bars, sheets, billets, etc...	14,236	39,282	53,518
Steel castings, incl. side frames, bolsters, etc.	5,071	22,896	27,967
Axles, forgings, incl. rolled steel wheels, etc.	4,271	17,866	22,137
Total	23,578	80,044	103,622

builders, includes 1,923,262 net tons of plates, shapes, bars, sheets and billets; 532,832 net tons of steel castings; 498,537 net tons of axles, forgings and rolled steel wheels; 297,844 net tons of bolts, nuts and miscellaneous steel for building equipment in railway shops; also 1,005,161 net tons of rail; 508,171 net tons of track fastenings; 66,441 net tons of frogs, switches, guard rails and other track accessories; and 91,317 net tons of steel for railroad bridges and buildings.

The 4,914,556 net tons of steel which the railroads and builders of railway equipment estimate will be required in 1941 roughly compares with 3,450,000 tons of finished steel used for railroads and railway equipment in 1940 and represents about 8.2 per cent of the estimated requirements of steel for civilian needs in this country during 1941, and is compared with 3,100,000 tons of steel required for the direct defense needs of this country during 1941 and 13,400,000 tons required for export, ac-

Table 4—Total Requirement of Steel for Rail Transportation, Year 1941\*

	On order N. T.	To be ordered N. T.	Total N. T.
Plates, shapes, bars, sheets, billets, etc...	1,126,469	796,793	1,923,262
Steel castings, incl. side frames, bolsters, etc.	241,579	282,244	523,823
Axles, forgings, incl. rolled steel wheels, etc.	202,783	295,754	498,537
Miscellaneous steel, incl. bolts, nuts, etc.	123,670	174,174	297,844
Rail	705,211	299,950	1,005,161
Track fastenings	338,059	170,112	508,171
Frogs, switches, guard rails, etc.	35,619	30,822	66,441
Steel for bridges, buildings, etc.	20,914	70,403	91,317
Total	2,794,304	2,120,252	4,914,556

\* Estimated as of May 1.

ording to latest estimates. That the railroads' estimate of steel required for the present year may actually understate the full requirements, considering the programs now under way or in process by the railroads to meet growing demands for rail traffic and national defense problems, is indicated by the fact that consumption of finished steel for railroads and railway equipment totaled 5,605,000 tons in 1929 and 5,817,000 tons in 1926.

EIGHT "HOBBY" TRAINS in all are scheduled for the 1941 season by the New York, New Haven & Hartford. First item on the program was a foldboat-cycle trip from New York to Falls Village, Conn., on May 11. Due to capacity patronage last year of its single "Husking Bee" excursion, the road plans to run two such junkets in the fall of this year.

## A. A. R. Suggests Large Car-Buying Program

THE Association of American Railroads last week advised its members that the carriers will need 120,000 additional freight cars to handle 1942 traffic and another 150,000 to take care of 1943's business. This two-year program calling for "an increase in ownership" of 270,000 cars is in addition to outstanding orders for 1941 delivery which have car-building facilities booked to capacity until October 1.

Announcement of the A. A. R. findings came in a May 1 statement from A. A. R. President J. J. Pelley. "The Association of American Railroads," Mr. Pelley said, "has just completed and sent to the railroads today a study of the probable freight car loadings for 1942 and 1943, with an estimate of the additional freight cars necessary to handle this loading. For 1942 the Association estimates a traffic of 43,680,000 car loads, requiring an increase in ownership of freight cars of approximately 120,000. For 1943, the estimate of car loadings is 48,048,000, which would call for another increase of approximately 150,000 cars to handle the traffic of that year. This increase in car ownership would be in addition to the new cars acquired and those rebuilt since the beginning of the present emergency for the handling of 1941 traffic."

With respect to the prospects for handling the current year's traffic, the latest authoritative advices were those to the effect that executives attending April 25's meeting of the A. A. R. board of directors still felt that there will be no actual car shortage, although there will be "tight situations" during weeks of peak loadings. As noted in the *Railway Age* of May 3, page 773, Ralph Budd, transportation commissioner, Office for Emergency Management, attended the A. A. R. board meeting; and he was represented as remaining confident of the railroads' ability to do a satisfactory job of handling this year's business—despite upward revisions of previous estimates that 1941 traffic would be only about 9.5 per cent above that of 1940.

Meanwhile on April 30 the National Defense Advisory Commission told shippers and receivers of freight that they could make a large contribution to the defense effort by effective compliance with certain suggestions designed to make the most efficient use of car capacity. Also, the A. A. R. Car Service Division has kept on the job of anticipating car requirements and lining up available equipment to meet them. The Defense Commission's statement is given elsewhere in these pages in the address by Ralph Budd.

Recent car-chasing activities of the Car Service Division have included the May 1 circular promulgating the 1941 reissue of Special Car Order No. 37 to expedite the return home of ventilated box cars owned by the Atlantic Coast Line, Central of Georgia, Charleston & Western Carolina, Louisville & Nashville, Seaboard Air Line and Southern. The reissue was required on account of "impending heavy movement of perishable freight, principally watermelons and potatoes, with a possible inadequate supply of ventilated box cars." Also, the Division has been promoting compliance with its recently-announced quota plan for the return of Western box cars to handle the wheat crop.

In the latter connection, the Department of Agriculture is understood to have become apprehensive as to the ability of the railroads to handle the crop, the harvest of which begins early in June. As pointed out in previous discussions of the wheat movement, there are complications this year in that much of last year's crop is



now in the elevators to which the new crop must naturally flow in the Central West and Southwest. Plans are now underway by which about 40,000,000 bu. of the old crop will be moved to Atlantic and Gulf of Mexico ports; and that movement, involving long hauls for the equipment, will accentuate the car-supply problem.

Thus the Car Service Division is understood to be emphasizing to railway officers its view that the quota plan for relocation of cars to the West must be carried out 100 per cent. At the same time the Division is said to feel that the situation can be met if 100 per cent performance is forthcoming from all roads. The Division's promotional activities in connection with the quota plan are further understood to involve suggestions that the alternative to 100 per cent performance might be an expensive mass movement of empty cars to the West under Interstate Commerce Commission orders.

Performance on the quota program during the first quarter-monthly period of its operation (April 15 to April 23) was characterized as "disappointing" in an April 5 circular issued by L. M. Betts, manager of the Car Service Division's Closed Car Section. Mr. Betts released figures which show that on April 23 the Eastern and Southern roads as a whole had failed by 2,300 cars to meet their composite quota for the return of Western cars. The detailed figures showed some roads ahead of their quotas, but the progress in that connection was more than offset by the failure of other lines to make the grade. "The return of Western cars to home lines," Mr. Betts said, "must be definitely stimulated in view of the adverse showing in this first report."

Also, Mr. Betts referred to the aforementioned plan to move 40,000,000 bu. of last year's wheat carryover to Atlantic and Gulf of Mexico ports. He understands that approximately 15,000,000 bu. will go to Gulf storage and 25,000,000 bu. to Eastern points, largely to Buffalo, N. Y., Albany, and North Atlantic ports. "The latter situation," he went on, "involves a movement of approximately 15,000 additional carloads of freight from territory West of the Mississippi to the East. The problem of restoring Western box car supply by return of Western ownership cars in time for the crop movement beginning soon after June 1 is thus further seriously handicapped."

"The unqualified cooperation of every railroad is necessary to accomplish the results that must be achieved. Western railroads must reduce to the absolute minimum the loading of Western cars into Eastern-Southern territory. Eastern railroads must carry on an energetic campaign to apply Western cars on loading to Western territory; in addition there must be maintained a heavy movement of Western cars empty to home lines to offset the increasing excess movement of loaded traffic into Eastern territory. Southern lines must do likewise, their particular problem being to avoid reloading of Western cars to the North and East following the normal trend of their loaded traffic."

Another May 5 statement bearing on the prospective wheat traffic came from the Department of Agriculture which announced results of a nationwide survey of storage facilities for grain, beans, and flaxseed. The statement said that "the storage situation is not serious from the standpoint of the United States as a whole but a shortage of space for the handling of the 1941 winter wheat crop does exist in some areas." Then comes a reference to the above-mentioned "steps to shift grain under the control of the Commodity Credit Corporation to Eastern points where ample storage is available." Later on in the statement comes this: "The Transportation Division of the Office of Emergency Management has reported to the Secretary of Agriculture that cars will not be available for grain movement unless storage

space is available at the destination point, thus making immediate unloading possible and allowing maximum use of cars for carrying defense items."

Also, on May 1 the Car Service Division promulgated a reissue of Special Car Order No. 42 which is designed primarily to assure an adequate supply of box cars for government truck loadings at the Pontiac, Mich., plant of the Yellow Coach & Manufacturing Company, and the Detroit, Mich., plant of the Fargo Motor Company. The reissue was prepared "to clear up some confusion apparently existing as to the enforcement of this order." To that end separate sections of the order are devoted to, (a) end-door 50-ft. cars, and (b) device-equipped 50-ft. cars; and separate lists of ownerships in each classification have been issued. "This reissue," said Chairman W. C. Kendall of the Car Service Division, "does not change the essential character of the order as heretofore in effect, but it is hoped the clarification attempted will make enforcement easier and more effective."

Other developments in connection with equipment to handle the current year's business included the presentation made last week by A. A. R. President Pelley to the Priorities Division, Office of Production Management. The presentation showed that railroad requirements for steel during the remainder of 1941 will total 4,914,556 tons. That figure includes requirements for rail, track materials, etc., as well as equipment. Included was 1,497,514 tons as the requirements of car builders and 103,622 tons as the requirements of locomotive builders.

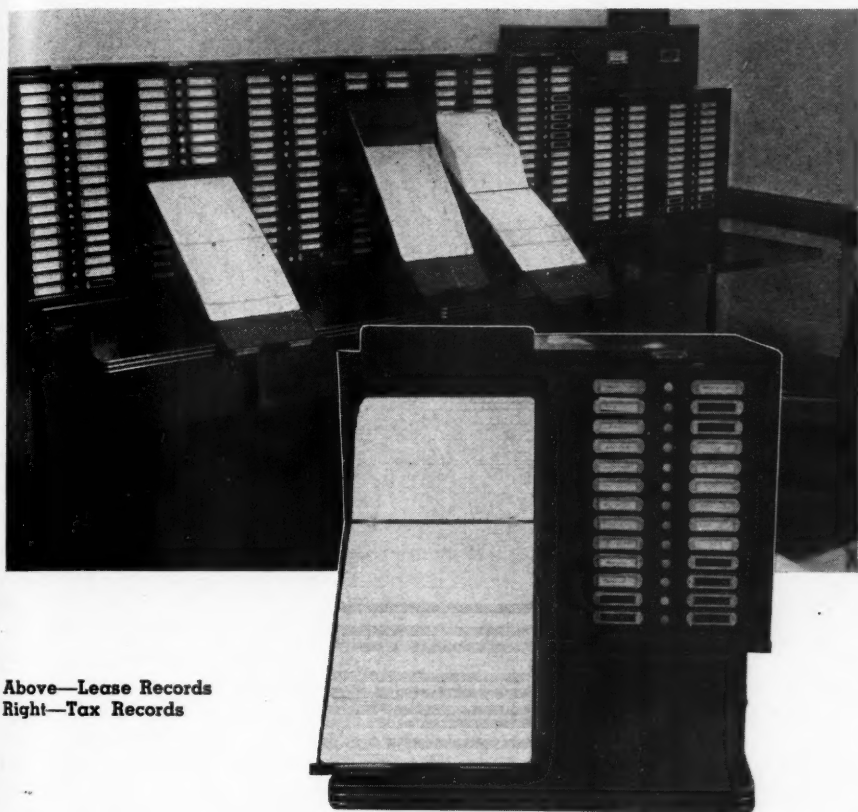
Also, there was President Roosevelt's letter to Chairman Land of the Maritime Commission, asking that two million tons of merchant shipping be made available "at the earliest possible moment" in connection with the program of "all-out" aid to the democracies. Among other things this is expected to involve transfer of tankers and intercoastal vessels from their present routes, thus diverting traffic to the railroads. Furthermore the settlement of the bituminous coal strike will result in greatly augmented loadings of that commodity.

\* \* \*



The "Jeffersonian"—The Pennsylvania's New All-Coach, 20 $\frac{1}{4}$ -Hr. Train Between New York and St. Louis, Mo.—Rides Behind a Streamlined Pacific Steam Locomotive In Territory West of Pittsburgh, Pa.

# Illinois Central Revamps Land and Tax Records



Above—Lease Records  
Right—Tax Records

Visible card system a time saver in collecting rents and watching the government's mounting charges

**D**URING recent months the Illinois Central made two installations of visible card record systems which have proved welcome innovations in handling its real estate and tax work. Both installations are used by the land and tax department. One installation of 4,000 cards was made in August, 1940, to keep the records of all taxes payable to cities, counties, states and the federal government (aggregating \$10,000,000 annually), and the second installation of 9,000 cards was placed in operation last January to keep the record of all leases of real estate to industries and persons, from which the railroad collects approximately a million dollars annually in rent. Both installations are the result of studies and experiments to conserve space, simplify the posting work and to obtain greater flexibility for reference purposes. They replaced book records of many years standing.

The equipment, which was purchased from the Acme Visible Records, Inc., consists of movable steel cabinets containing steel trays in which cards lie flat with their outer edges exposed to view and their inner edges fastened in place but hinged to bring the entire face of each card in view when desired.

Two types of cards are used for the tax record, each 5 in. wide and 9 in. long. One is used for the general tax accounts included in railway tax accruals, I. C. C. Account 771, covering all carrier property and is designed to show the state, county and city and the type of tax on the visible portion, while the body of each card carries a full description of the tax, the tax receipt

reference, the file reference, the accounting department charge and the account number, and provides a 10-year record of tax payments, whether payable monthly or annually. The second type of card is used for non-carrier, locally assessed real estate carried as Miscellaneous Physical Property, I. C. C. Account 705, and shows the state, county, township or city, the subdivision, section, township, range, lot and block on the visible portion of the card. Each card has spaces for the full description of the property and a 10-year record of rates, assessments and taxes paid which is useful in filing objections to taxes or when selling the land. The exposed edge of each card for general taxes carries numbers from 1 to 12 for use in attaching colored metal strips to show the month in which the tax is payable.

With these cards, the so-called railroad taxes can be easily grouped by states and by taxing districts within the state and locally assessed parcels of the real estate are also grouped by localities. The assessment, rate, tax and other information about each parcel can also be obtained readily with the cards and commissary accounts, license accounts, special assessment accounts, sales tax accounts, etc., can be arranged for quick reference. Various statistical information is also readily obtainable with this system of records.

The equipment for lease records consists of six steel cabinets placed on a steel stand with casters and an 18-in. wide draw shelf for working purposes. Each cabinet has a fire door, lock and key, and holds 1,584 lease records. The cards are each 5 in. wide and 8 in. long. The ex-



**Local Taxes**

ALBANY Cedar Rapids

ASSESSOR IN NAME: D & S C RR (ICRR)

TAXES PAID TO: Linn County

TAXES BILLED TO: Not billed

RATE	1940	1941	1942	1943	1944
1st Instalmt.	47.80				
2nd	107.47				

ALBANY Jefferson

COMPANY: Illinois Central RR

DESCRIPTION: General Taxes (Paid) Privilege Taxes (Paid)

YEAR	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
1939												
1940												
1941												
1942												
1943												
1944												
1945												
1946												

General 72 411 5.63 46

School 72 411 1.73 48

Privilege 72 416 1.50 00 72 20 1.75 00

ALBANY Jefferson

COMPANY: Boner Bros. Transfer Co.

DESCRIPTION OF PROPERTY: site for warehouse

REMARKS: Non-Charter

ACQUIRED: West Frankfort, Ill.

RENT: 28.00 per month

EXTENSION: 4-30-40 4-30-41 4-30-42

PAYMENT IN ADVANCE: Formerly: J. D. Walker

Effective: March 1, 1932 to April 30, 1935

**General Taxes**

Sample Cards Used for Lease and Tax Records. Metal Signals on Lower Edges For Ready Reference

posed edge of each card gives the name and address of the lessee and the lease number and leaves space for attaching a signal to show the month that rents are payable. One corner of the exposed edge of each of these cards shows the railroad division in which the property is located. The body of the card is divided in two sections, the left three quarters showing the essential information about the lease and having spaces in which to check off the monthly payments for a period of years, while the right quarter of each card is reserved for notations of extraordinary arrangements covering the rental billing, payment of rent, or privileges extended in connection with the lease.

Properties under lease on the Illinois Central vary from mineral and timber lands to farms, railroad sidings, trackage, warehouse space, business offices, retail stores, dwellings and to small spaces in railway stations for vending machines or news stands. The treasurer is responsible for all money transactions but the preparation and policing of the leases is performed by employees in the land and tax department where approximately four people are engaged in checking expiration dates, rental rates, property descriptions and compiling special information.

Previously the department used 13 loose-leaf binders, each 8 in. wide and 12 in. long. These binders had been used for many years and were badly worn and the pages soiled and the records of each railroad division were kept in one or more binders, depending upon the size of the division. These books were in constant demand. Often the books sought by one clerk were in use elsewhere while the loose-leaf binder sheets, being alphabetically indexed under each division, required the constant turning of pages to find the particular lease record desired. Time was also lost in leaving desks to obtain the books and in leaving desks again to return them to the racks.

With the visible cards, the department has completely eliminated the 13 books and the indices. All the lease records are now on strong cards which are always in alphabetical order and clearly visible and the entire record is in two neat compact steel cabinets, which can be moved easily from place to place. With the old records, two clerks were required three days each month

to post the billing in connection with the leases but one clerk now performs the same work in half the time and this permits the second clerk to perform other work while the billing is proceeding, thus avoiding an accumulation of work and preventing delays in performing other duties. Overtime has been eliminated. The signals also make it possible to go through all of the live cards, which are in excess of 6,000, in less time than previously, since it is now necessary only to put a finger on the card bearing a signal and flip it into place. The ease of removing, replacing, re-arranging and adjusting cards has proved a time saver and it is also no longer necessary to use vault space to protect the records from fire or tampering.

Both installations are under the direction of R. C. Beckett, general attorney and land and tax commissioner, with E. M. Zornig in charge of the lease division, and S. E. Anderson in charge of the tax records.

\* \* \*

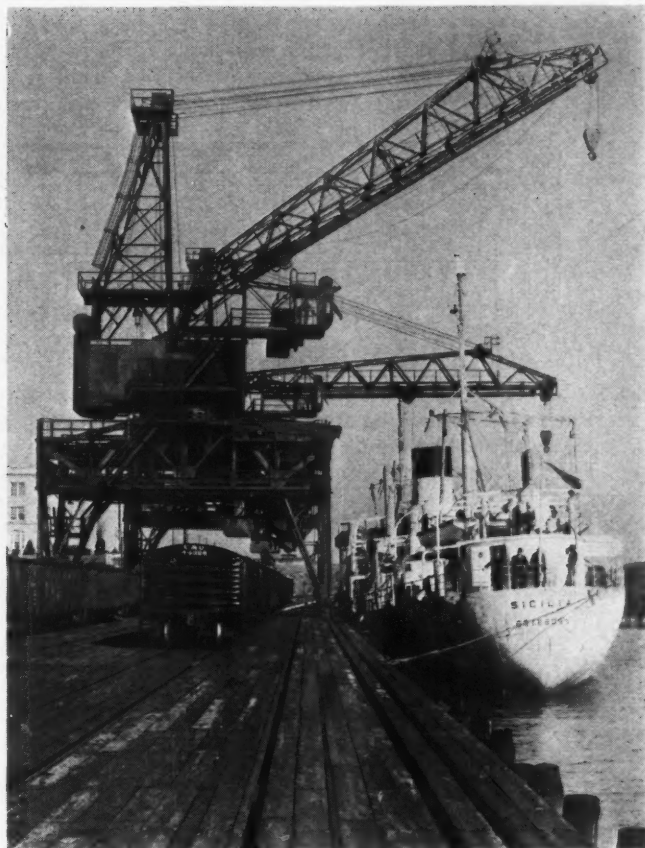


The Central of New Jersey and the Lehigh Valley Cross the Delaware River Side by Side Between Phillipsburg, N. J., and Easton, Pa. The Single Track Bridge on the Oblique in the Background Is Used by Lehigh & Hudson River Trains Between the Central Tracks and the Pennsylvania's Belvidere-Delaware Division



# Installs Large Portal Cranes on Timber Pier

Two high-speed versatile machines on the Chesapeake & Ohio, at Newport News, were designed especially for handling manganese and chromium ore and other heavy cargo



The Cranes in Operation, as Seen from a Point on the Outshore End of the Pier

**T**WO traveling portal cranes, which are notable especially for their unusually large size and capacity, their speed of operation and their versatility, have been installed by the Chesapeake & Ohio on an existing tide-water timber pier at Newport News, Va. These cranes are designed especially for handling bulk materials, such as manganese and chromium ore, from ships to railroad cars and for transferring scrap iron, steel billets and other types of heavy cargo between cars and ships. They were installed for the purpose of placing the railroad in a better position to handle increasing business of this nature.

Briefly, each of the cranes embodies a traveling portal gantry which is surmounted by a high-speed full-revolving crane with a 90-ft. boom capable of handling a maximum load of 25 tons. The crane portals have a span of 52 ft. 11½ in. and extend over all five tracks on the pier, being supported on the outer rails of the outside tracks. This leaves three tracks on which cars can be spotted for loading or unloading operations while the cranes are in operation. Each of the cranes weighs approximately 500,000 lb.

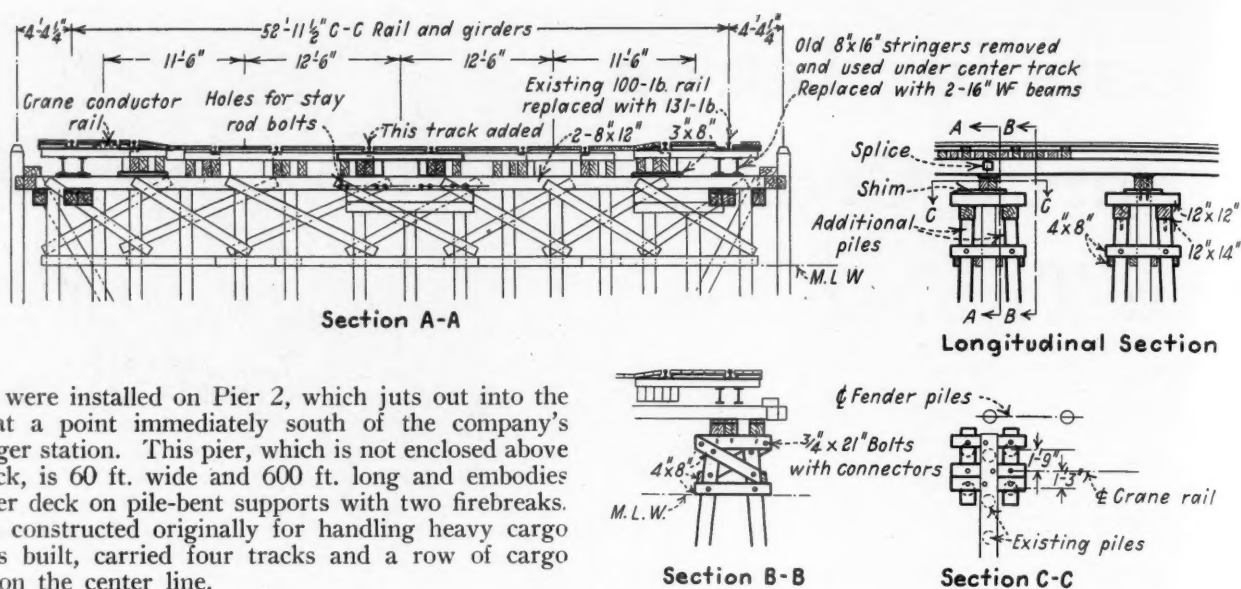
Of special interest is the wide versatility of the cranes, which is enhanced by the fact that the booms are of a new combination type, being designed for both straight-line grab-bucket operation and hook lifting. Each of the booms is equipped with a rope-reeved trolley carrying an 80-cu. ft. grab bucket, and when the bucket is in operation the boom is held in the horizontal position while the trolley moves back and forth on it. For hook lifting, each boom has a double-sheave hook-block at its outer end, and when using this feature the boom is raised and lowered, or luffed, in the manner of a conventional crane boom. Each crane is also equipped for magnet work, using twin 65-in. magnets hung from the hook.

Another interesting feature of the cranes is the movable hopper for receiving ore that is mounted in each gantry frame. A support for the hopper is provided at each end of the gantry and it can be moved from one end to the other, depending on which side of the pier the vessel is moored that is being unloaded. From the hopper the ore passes into a traveling weigh larry mounted in the gantry frame, from which it can be dumped into cars spotted on any of the three tracks under the gantry.

## Capacities and Speeds

A few figures will serve to demonstrate the large capacities and the high speeds of operation of the cranes. Each of them is designed to handle the fully loaded ore bucket or a 15-ton load on the hook at a maximum radius of 80 ft. 5 in., or a 25-ton load on the hook at a maximum radius of 70 ft. 5 in. The different movements are designed to operate at the following speeds: Hoisting loaded bucket, 275 ft. per min.; racking loaded bucket, 275 ft. per min.; hoisting magnets, 180 ft. per min.; hoisting a 25-ton load on the hook-block, 180 ft. per min.; crane rotation, 2-revolutions per minute; crane travel, 100 ft. per min. With the bucket operating at the speeds mentioned above, the cycle of operation is 30 sec. with the ore at mean low water, a hatch opening 20 ft. in width and 20 ft. above mean low water, and with the bucket digging at the center of a ship with a 60-ft. beam. When the magnets are in use the cycle of operation is 60 sec.

Newport News is the terminus of the Chesapeake & Ohio on the Atlantic seaboard. At this point the railroad maintains extensive tide-water terminal facilities, located on the east shore of the James river. The new



cranes were installed on Pier 2, which juts out into the river at a point immediately south of the company's passenger station. This pier, which is not enclosed above the deck, is 60 ft. wide and 600 ft. long and embodies a timber deck on pile-bent supports with two firebreaks. It was constructed originally for handling heavy cargo and, as built, carried four tracks and a row of cargo masts on the center line.

### Pier Alterations

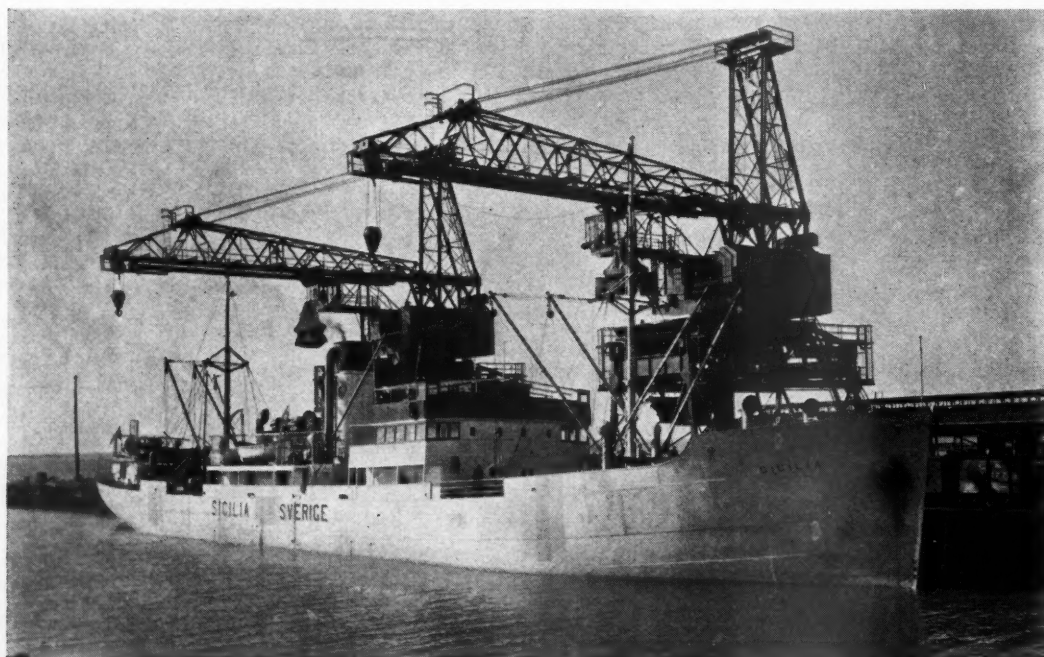
In adapting the pier to carry the gantry cranes, the alterations that were made to the deck included the removal of the cargo masts and the installation of another track on the pier center line. Also, since the gantry travel trucks, which are of the tandem type, are carried on the outer rails of the outside tracks, the 100-lb. rails in these tracks were replaced with 131-lb. rails. At the inshore end of the pier the two outside tracks converge into the adjacent tracks, but the outer rails of these tracks were continued in a straight line 100 ft. beyond the end of the pier so that, if desired, the gantry cranes can be removed from the pier to permit cars to be spotted on the outside tracks and to place the cranes behind the bulkhead as a safeguard in case of fire on the timber pier. At the point where each of these extended crane rails join the track rails, a movable rail was installed that can be alined with either the track rail or the extended crane rail.

Before the cranes could be installed, it was necessary to strengthen the pier substructure under the outer rails

These Drawings Show the Method of Strengthening the Pier. Heavy Lines Indicate Members that Were Added

of the outside tracks to render it capable of carrying the heavier loads. The original pile bents in the pier are spaced an average of about 12 ft. 6 in. apart and are each capped by two 8-in. by 12-in. timbers. Under each rail there were three 8-in. by 16-in. timber stringers. In the work of strengthening the pier, the existing stringers under the outer rail of each outside track were removed to a position under the new track in the center of the pier, and were replaced by two 16-in. 78-lb. wide-flange beams which are continuous over three spans.

To provide the additional bearing power required to carry the reaction from the wide-flange beams, two helper bents were driven under the beams at each of the existing bents. The helper bents are driven on opposite sides of the existing bent, and each of them consists of two piles, strongly braced and capped with a 12-in. by 14-in. by 6-ft. timber. Spanning between the two helper bents at each location are three 12-in. by 12-in. by 6-ft. timbers under the cap of the existing bent,



This View Shows Both of the New Cranes in Operation Unloading Bulk Material From a Vessel



to transfer a portion of the load to the helper bents. The stringers under the inner rail of each outside track were shimmed up 3 in. to compensate for the increased height of the wide-flange beams under the outer rail.

### Details of Gantry

In each of the cranes the gantry consists essentially of two riveted structural steel trusses spanning between the legs, also of structural steel, which terminate at their lower ends in the travel trucks. Each of the latter embodies two trucks of four wheels each, all of which are arranged in tandem. One of the trucks at each end of the gantry is geared for travel and is powered by a 25-hp. motor which is equipped with a thrustor-type brake and a magnetic reversing plugging type control. To hold the gantry securely in position while the crane is in operation, a solenoid-operated rail clamp is provided at each end. Spring-mounted bumpers are provided



View of One of the Cranes Taken Before it Was Placed in Operation. Note Bucket at Rest on Shelf Provided for This Purpose

vided to cushion the shock if the two cranes should strike each other.

All motors on the cranes are wound for operation with 440-volt, 3-phase, 60-cycle current which is picked up from conductor rails on the north side of the pier by two sets of collector shoes mounted on the travel trucks at that end of the gantry. The three conductor rails, which are located between the track rails on the north track, consist of T-sections and are placed under timber guard planks, which are bolted to the top flanges of chairs made of 8-in. 35-lb. wide-flange beams lag screwed to the track ties. Timber planks are also placed along both sides of the conductor rails to form a trough and the faces of these planks are lined with cement-asbestos board. The floor of the trough, which is formed by the ties and 2-in. by 4-in. timbers between them, is protected by a 1/2-in. coating of cement grout. The purpose of the cement-asbestos board and cement grout is to protect the creosoted timber from possible ignition by sparks from the collectors.

The movable hopper, the weigh larry, and a cabin for the weigh-larry operator are mounted overhead in the gantry between the two trusses. As noted previously, there are two positions for the movable hopper, one at each end of the gantry frame, and it can be moved from one position to the other as desired with the aid of the hook block on the boom. The hopper is 17 ft. square at the top and has a capacity of 1,000 cu. ft. It is equipped with a motor-operated gate for discharging into the weigh larry, which is controlled from the larry operator's cab.

### The Weigh Larry

The weigh larry, which has a capacity of two bucket loads, is suspended from two parallel channels by means of four wheels. It is propelled on these channels by a 15-hp. motor equipped with a thrustor brake and a reversing drum controller. A motor-operated gate is also provided on the weigh larry to control the discharge of ore into railroad cars spotted on the pier. Both the movable hopper and the weigh larry are lined with 5/16-in. plates of high-carbon steel.

The weigh larry has a dial scale with a capacity of 20,000 lb. It gives weight graduations in 20-lb. increments and has a weight-printing attachment. There are three controls in the weigh-larry cab, one for the larry travel, another for the larry gate, and a third for the gate in the movable hopper. Two men are stationed in this cab, an operator and a weigh clerk who also handles the control for dumping ore from the larry into cars.

### Description of Cranes

The revolving portion of each crane is supported on the gantry by means of a roller circle, 19 ft. in diameter, which consists of double-flanged rollers operating between two opposed circles of 90-lb. rails. Running up through the crane and anchoring it to the gantry is a steel stediment, or center pin, which has a ring-type collector for transmitting electric power to the rotating portion of the unit. Power for rotating the crane is provided by a 75-hp. motor through a circular rack and pinion gear. This motor has a thrustor-type brake and a magnetic reversing plugging control.

Resting directly on the rotating platform is the counterweighted machinery house, entirely enclosed, from the top of which protrudes a structural steel A-frame carrying the boom-hoist sheaves and the boom hinge. The boom itself is of the truss type, made of silicon steel to reduce the weight to a minimum, and is capable of being raised an amount sufficient to permit a bucket carried by the hook to be emptied into the movable hopper. It has a double-drum hoisting mechanism which is powered by a 150-hp. motor with a solenoid brake and a thrustor-type auxiliary brake. The lowering control for the boom is of the magnetic reversing regenerative type. When the boom is being used for hook-block work, a limit switch can be brought into use to prevent it from being lowered beyond the maximum radius permitted for this class of work, although the down limit can be by-passed by means of a special switch provided in a locked cabinet.

### Trolley and Bucket

The bucket trolley that is carried on the boom has four wheels and is moved by a cable actuated by a 60-hp. motor in the machinery house. This motor has a reversing plugging-type control and a limit control circuit. The bucket is of the link type and has an over-all width of 5 ft. 5 in. and a spread when fully open of 14 ft.

Removable teeth, bolted in position, are provided on the digging edges of the bucket. When the bucket is not in use, it is deposited on a platform provided for this purpose directly under the inner end of the boom.

All operations of the bucket and the hook lines are actuated by a two-motor three-drum hoisting unit. These are 150-hp. motors and are provided with solenoid brakes and reversing regenerative control. In addition, both motors have mechanical brakes, the levers for which are in the operator's cabin. Direct current for the operation of the magnets is provided by a 35-kw. motor-generator set, while a 15-kw. motor-generator set produces direct current for the operation of the solenoid brakes, rail clamps and contactors in the alternating-current controls.

The crane operator's cabin, in which the side walls are largely of glass, is so located on the rotating part of the unit, at a point under the boom near its inner end, that the operator has a clear view of the work as well as in both directions along the pier. It houses one operator and contains controls for operating the bucket trolley and bucket lines, the gantry travel, the crane rotation and the boom and hook hoists, as well as foot levers for the mechanical brakes.

The motors for operating the bucket lines, the boom hoist, the trolley travel and the crane rotation are totally enclosed and have forced-ventilation systems with air filters, which are designed to prevent the temperature of the motors from rising more than 40 deg. C., even if a 30-sec. cycle of operation should be maintained over a 24-hr. period. Motor-generator sets are fan cooled, while on motors that are used only intermittently the ventilation systems are designed to prevent the temperature from increasing more than 55 deg. C.

\* \* \* \* \*

All sheaves and hoist drums in the cranes are annealed steel castings and are machine scored. Drum gears are of high carbon rolled steel, while other gears consist of annealed steel castings. All gears are machine cut except those in the rack and pinion for the crane rotation, which have cast teeth. The motor gears and pinions have herringbone teeth and are enclosed in dust-tight casings. All motors have roller or ball bearings, while elsewhere the bearings have removable split bronze bushings. The hoist ropes, including those used on the bucket trolley, are made of plow steel with hemp centers.

Two specially-designed portable car-pullers have been provided on the pier for shifting cars. Each of these pullers is mounted on a steel frame having four flanged wheels for operation on standard gage track, and can be anchored to the track by means of a rail clamp at each wheel. The pulling mechanism on each unit consists of a capstan winch with 150 ft. of cable, which is operated by a 10-hp. motor. Each car puller is provided with a 1-hp. travel motor. Lifting loops attached to the corners of the pullers permit them to be shifted from one track to another by the cranes. Two motor-operated box-car loaders with necessary bins and conveyors are provided as supplemental equipment for loading materials from the scale hopper into box cars.

As part of this project a sub-station transformer unit was installed on land near the inshore end of the pier to supply the power requirements of the cranes. Also it was necessary to make rather extensive changes in the track layout at the inshore end of the pier, the principal purpose of which was to straighten the tracks the necessary amount to permit the crane tail rails to be installed. The pier and cranes are abundantly lighted for night operation.



Photo by "Sparky"

Trainmen and Engine Crews Listen to the Whys and Hows of Courtesy Aboard a Southern Pacific Instruction Car Spotted at Roseville, Cal.



# NEWS

## C. of C. Resolutes on Carrier Status

Comes out flatfootedly against government ownership and for voluntary mergers

Various resolutions dealing with transportation were adopted by the Chamber of Commerce of the United States at its 29th annual meeting, which was held in Washington, D. C. from April 28 to May 1. At the same meeting Albert W. Hawkes of Kearny, N. J., president of Congoleum-Nairn, Inc., was elected president of the Chamber to succeed James S. Kemper, president of the Lumbermen's Mutual Casualty Company of Chicago, Ill.

The following subjects among others were dealt with in resolutions adopted by the membership:

1. Freight forwarders—with a declaration that measures should be adopted to permit freight forwarder operations to continue in the main as at present, pending further experience and investigation. Common carriers should be permitted to publish special rates for the type of service required by forwarders, such rates to be available to anyone else in a position to utilize the services as part of a through movement. Congress should provide for the Interstate Commerce Commission to make a thorough investigation of the forwarder problem in its relationship to the whole problem of transportation of merchandise freight, and to submit recommendations. Forwarders should be required to obtain licenses from the commission and to keep such records and furnish such reports as the commission may prescribe.

2. Public ownership—with a declaration that, adhering to its firm belief that government should not engage in any field of business in which private enterprise can adequately serve the public interest, the Chamber opposes all suggestions for government ownership of railroads. It is unnecessary and should be vigorously opposed.

3. Railroad consolidations—with a declaration that the principle of voluntary consolidation of railroads should be preserved. Congress in the Transportation Act of 1940 has removed serious obstacles to such consolidation. Railroad management should give due consideration to the development of plans for consolidation and business men should lend full encouragement to such development.

4. Share-expense travel bureaus—with a declaration that regular use of private auto-

mobiles in transporting passengers for hire ostensibly as casual or occasional share-expense travel exempt from regulation is an invasion of the Interstate Commerce Act. Because of the conditions under which it is conducted it is likewise detrimental to the safety and welfare of its patrons and the general public. As so-called share-expense travel bureaus are an essential element in supplying patronage for this transportation, the exemption of casual or occasional transportation under the Interstate Commerce Act should not apply when arranged through such bureaus. As a further measure of control, states should require these bureaus to be licensed and bonded, and maintain records available for inspection. State and local authorities and business organizations should also cooperate in effecting control through proper taxation, publicity, and enforcement.

On the subject of the merchant marine the meeting adopted a resolution which said in part that the power of the government to requisition shipping should be limited to the imperative requirements for vessels for actual naval and military employment.

The Chamber also voiced its opposition to the divorcement of pipe lines from the oil companies, its resolution on petroleum reading to the effect that it "opposes all proposals for control by a federal bureau of production of petroleum from the ground and is against all efforts, legislative or otherwise, to break the petroleum industry into separate parts, such as production, refining, transportation and marketing."

Turning to the subject of civil aeronautics, the Chamber went on record as saying that the civil airport system is of great value for defense purposes and provision to make it adequate for both civil and military needs is a matter of public concern. It also feels that the federal government should continue its program for the provision of adequately equipped airways, including radio and other aids to air navigation.

### Equipment Depreciation Rates

Equipment depreciation rates for six railroads, including the New York Central and the Norfolk & Western, have been prescribed by the Interstate Commerce Commission in a new series of sub-orders and modifications of previous sub-orders in No. 15100, Depreciation Charges of Steam Railroad Companies.

The composite percentage for the N. Y. C. is 3.22 per cent, that for the N. & W., 3.62 per cent. Included in the prescribed rates for the N. Y. C. are those applicable to equipment leased from the Peoria & Eastern; another of the six sub-orders vacates a previous one which had prescribed rates for P. & E. equipment.

## Savings Bankers View RR Outlook

Roads' value to nation stressed, as educator condemns ditch and superhighways

Efficiency of the railroads in handling increased traffic; significance of the marked improvement in railroad revenues and fallacies in the St. Lawrence Seaway project, were discussed by a railroad trustee, a savings bank president and a college dean, respectively, at the 125th anniversary conference of the National Association of Mutual Savings Banks held in Philadelphia, Pa., on May 7. Henry A. Scandrett, trustee, Chicago, Milwaukee, St. Paul & Pacific, in an address entitled "Railroads on Their Mettle" outlined the possibilities of increased efficiency as a means of extending the marked power of the roads. Said he: "Big results can be obtained by the improved performance which is possible, and will be effected, when all realize the problem and contribute their part to its solution. If the average turn-around time is reduced but one day, or from 18 to 17 days, this saving alone is equivalent to an increase of 102,000 cars. Again, if the average load is stepped up but one ton, or from 28 to 29 tons, that increases the supply by 65,000 cars. These two items alone would be equal to a 10 per cent increase in car ownership. There are many other possibilities of a similar kind.

"A gigantic task lies ahead, which I do not seek to minimize. Carloadings in 1940 increased 2,442,000, or 7.2 per cent over 1939. In the first three months of 1941 carloadings were 14.8 per cent greater than in the corresponding period of 1940. The defense program is just getting well under way, and the peak load it will impose upon our transportation facilities is ahead of us, though it should be remembered also that quantities of construction and raw materials already have moved and without any serious delay or congestion."

Acknowledging that government control is necessary to some extent, Mr. Scandrett declared: "I subscribe to the view that self-reliance and personal responsibility still are fundamentals of the American philosophy and that the American people still believe the principle of private enterprise and individual initiative is worth preserving. I believe, too, in the patriotism of my industry and its willingness to forego selfish interests for the public welfare, and, having these convictions, I urge for the

(Continued on page 818)

## Uncle Sam Ought To Buy the Cars

Eastman says they are defense expense which carriers ought not have to meet

Chairman Joseph B. Eastman of the Interstate Commerce Commission feels that the cost of any excess transportation demands upon the railroads in anticipation of national defense needs over and above those normally needed by the country should be borne by the federal government. This view was made known in an address delivered by the I. C. C. chairman before the National Association of Mutual Savings Banks at Philadelphia, Pa. on May 7.

At the same time Mr. Eastman took the occasion "to clear up the confusion which I think has existed in the minds of many" over the recent discussion of Southern coal freight rate differentials in the bituminous coal strike by asserting that "what the Southern operators want is still more favorable rates, chiefly on the ground, I presume, of the low costs and prosperity of some of the more important railroads which serve them." He also defended the commission's now well-established policy of "depression-proof" capital structures for reorganized railroads and warned his hearers that the sudden prosperity now being experienced by the country and especially the railroads is of a specious character and flows from an economy based on the production of goods intended solely for destruction.

Mr. Eastman feels that the country's transportation system can carry the burdens which will be placed upon it, but he also is aware that there are possible dangers in the transportation situation. The chief danger lies, he thinks, in the things that cannot be or are not foreseen and the failure to plan and be ready for all possible contingencies. "Have the railroads", he asked, "and the other carriers been told clearly and definitely by those in charge of defense production what they will be certainly called upon to do if that program is stepped up to the utmost possible extent? . . . While the need for such information is obvious, it is quite possible that it has not been forthcoming to the extent desirable, partly because of preoccupation with other matters, but chiefly because the programs have continually been changing and expanding."

If the railroads and other carriers have this information, Mr. Eastman can see two particular dangers. One lies in the fact that the railroads and other carriers are private enterprises and it is the duty of the managements to safeguard the interests of the owners. As a result, the tendency will be, he believes, in such circumstances to be conservative in assuming financial obligations which will be permanent, in order to meet the defense needs which, it is hoped, will be temporary.

"Such conservatism," declared the I. C. C. chairman, "may make the margin of capacity to meet possible contingencies dangerously narrow. The way to avoid

this danger, it seems to me, although I realize the practical difficulties in giving effect to the idea, is for the government to assume the financial burden of additional transportation facilities which are needed only in anticipation of defense demands and which have no relation to the normal needs of the transportation properties. This is plainly a burden which should be borne by the nation as a whole and not alone by the carrier owners."

The other danger, in Mr. Eastman's opinion, is that the transportation problem will be dealt with too much as though it were a railroad problem exclusively. Because of the great flexibility of their operations, Mr. Eastman believes that trucks are particularly useful in the event of unforeseen conditions. If the trucks are to be used to the greatest possible advantage, he pointed out, plans for their mobilization and centralized direction in the event of such emergent need must be in readiness with the necessary organization for carrying them into effect, and he further assumes that those in authority have given thought to this problem.

Although he sees no indication at present that any plans are afoot to have the government take over the railroads, there is no doubt in his mind that if there are any defaults or deficiencies, "the government will not long hesitate to assume control if by so doing it can see a way of correcting or averting dangerous conditions." Since private managements have this in mind, he feels that they will do everything in their power to avoid defaults and deficiencies.

Mr. Eastman referred briefly to recent press reports which had discussed Southern coal freight differentials as figuring prominently in the bituminous coal strike and the possible action by the commission in correcting the alleged disparity between the northern and southern coal rates. The chairman feels that there has been an apparent misunderstanding in regard to this matter which ought to be cleared up.

He began by explaining that in the last few years "rather vociferous complaint has developed in this Southern territory on the ground that the freight rates therefrom on manufactured goods to the populous Official territory are too high compared with the corresponding rates within the latter territory, to the detriment of the South as a place for the location of manufacturing industries. There is much to say pro and con on that issue which, of course, I shall not undertake to say here. What these Southerners want, however, is a parity of rates mile for mile with the Northern rates."

"With this issue is confused the issue with respect to the relative rates of the so-called Northern and Southern coal operators. They are in fact quite different issues. In the first place the mines of the so-called Southern operators in Virginia and West Virginia, although not in Kentucky and Tennessee, are many of them located within the bounds of Official territory and the railroads which serve them are classed as Official territory lines. In the second place these so-called Southern operators are not seeking rates North-bound which are relatively on a parity mile for mile with those of their Northern com-

(Continued on page 818)

## Raise Race Issue Re FEC Firemen

Union alleges road refuses to hire whites and that negroes make inferior help

The Brotherhood of Locomotive Firemen and Enginemen has asked the Interstate Commerce Commission to disapprove all pending plans for reorganization of the Florida East Coast under section 77 of the Bankruptcy Act on the grounds that the public interest is not served by the employment policies of the management insofar as it affects the firemen on that road. Specifically, the union charges that the management has consistently discriminated against white men by refusing to hire them as firemen and using negroes instead, and is currently using a "check off" system under which it deducts certain union dues from the colored firemen's wages, an act, which the union charges, is in direct violation of the Railway Labor Act.

These charges are made in a brief filed with the commission by the union in which it asks the full commission to overrule a recent decision of Examiner Jewell which denied the union the right to intervene in the case. The brief goes on to say that Examiner Jewell made his ruling on the ground that it was not within the purview of the commission to consider employment policies in ruling on the legality of a railroad reorganization.

The brief argues that the plan of reorganization must be "compatible with the public interest" and that it is self-evident that any of the present plans, if approved by the commission, cannot be in the public interest because they would continue in power a management whose policies constitute a violation "of public law and policy." The brief goes on to assert that the effect of approving any of the plans "would be that an agency of the federal government would be lending affirmation and support to a continuation of acts by the Florida East Coast that are contrary to public law and policy. The commission should not, as a matter of principle and may not as a matter of statutory authority, permit this situation to occur."

After pointing out that section 77 provides that any plan approved by the commission must be "in the public interest," the brotherhood calls the commission's attention to the fact that these are the same words which are used in the section of the Interstate Commerce Act dealing with commission approval of consolidations. It is then argued that "public interest" in the section 77 act is fully as broad as that in the consolidation section, under which language the commission has dealt with matters affecting the welfare of employees.

The brief charges that the F. E. C. "pursues, as one of its subversive employment practices, a policy of absolute discrimination against the white race in the employment of firemen." "Regardless of the qualifications of an applicant for a job as fireman," the brief continues, "employment is arbitrarily denied him if he is white. This policy is productive of race



prejudice and contrary to public policy. This short-sighted management policy has a prejudicial result on the financial interests of the railway and its security holders."

"It is a matter of common knowledge that the race being discriminated against is capable of rendering a higher degree of efficiency, economy and safety in the performance of firemen's duties than negroes are. This is corroborated by the fact that no railroad in the United States permits a negro to assume the duties of a locomotive engineer."

The brief also charges that some of the negroes employed by the F. E. C. are illiterate and unable to read train orders, dispatches, or safety rules. It is also alleged that when the management needs new engineers, it has to hire them from other roads, rather than training them as firemen as do other companies. This, it feels, is an uneconomical practice.

The brotherhood also claims that the management employs a "check off" system under which the company pays to "a certain Mrs. Helm" the dues or assessments directly deducted from the colored firemen's salaries. This, it points out, is in violation of the Railway Labor Act.

It is also alleged that the colored firemen are paid approximately 18 per cent below the standard wages paid firemen on all other railroads in the southeastern territory.

### Streamliners to Continue Florida Run During Summer Months

The Dixie Flagler, the City of Miami and the South Wind, streamlined deluxe coach trains placed in operation between Chicago and Miami, Fla., in December by nine railroads comprising three routes, will continue to operate throughout the summer months.

### Lima Receives Order for 400 Tanks

The Lima Locomotive Works reported on May 5 that it had received an order for 400 tanks of the M-3-A combat type from the British Purchasing Commission. The company is prepared to enter production on a 24-hour basis at once. It is planned that 100,000 sq. ft. of floor space will be devoted to the project.

### Minimum Coal Prices

The Bituminous Coal Division of the Department of the Interior has called a hearing to be held in Washington, D. C., on May 21 to determine changes in the cost of producing bituminous coal. The determination will provide the basis "for making necessary changes in the minimum prices to keep them in line with the coal industry's operations cost."

### Roosevelt Has Heard Nothing About Moving I. C. C.

President Roosevelt said at his May 2 press conference that he had heard nothing of any proposal to move the Interstate Commerce Commission from Washington to some city in the Middle West. Replying to a general question about reports that plans were under way to transfer some federal agencies the President said he understood that Federal Works Administrator Carmody had been looking around to

### A. A. R. Calls Member Road Meeting

The Association of American Railroads on May 8 called a meeting of member roads to be held on Monday, May 12, at the Blackstone Hotel in Chicago. The call did not state any special reason for the meeting. However, it may be expected that the equipment situation will figure prominently in the discussions.

see if there were some more or less self-contained unit that might be moved from congested Washington to some point nearby.

Then came the specific reference to the I. C. C., the President being told by a questioner that the commission had been the agency most frequently mentioned in rumors of proposed moves to the Middle West. The President said he had not heard of it.

In the appendix to the May 2 issue of the Congressional Record appeared an extension of remarks by Representative Sabath, Democrat of Illinois. It was entitled "Certain Government Departments Should Be Removed from Overcrowded Washington to More Centrally Located Chicago." After his own brief statement in support of the foregoing proposition, Mr. Sabath inserted an editorial in the same connection which appeared in a recent issue of the Chicago Daily Times.

### Vacations With Pay

National Mediation Board meetings with management and labor representatives in connection with the demand of 14 non-operating unions for vacations with pay continued this week. As usual there was no information available at offices of the Mediation Board with respect to the status of the negotiations; although it was said that the negotiators were "meeting long hours."

### N. Y. R. R. Club to Meet May 15

The New York Railroad Club will hold its Spring show in the Engineering Societies building, New York, on Thursday, May 15, at 8 p. m. The program will consist of an "Evening of Magic" presented by Paul Fleming and his company.

The club will hold its annual outing and golf tournament at the Westchester Country Club, Rye, New York, on Thursday, June 5.

### St. Lawrence Seaway

Speaking in the House on May 2 Representative Young, Democrat of Ohio, stated it to be his judgment that in view of the opposition to the project the proposed St. Lawrence development "may not even be considered during this session of Congress." Mr. Young thus gave expression to reports which have been heard in Washington to the effect that President Roosevelt may not at this time press for approval of the United States-Canadian agreement which he sent to Congress on March 21. On the other hand there is respectable authority

for the view that the St. Lawrence remains a live issue before the present session.

In his brief March 21 message transmitting the agreement to Congress the President expressed his expectations "to request introduction, in due course, of legislation designed to make this agreement effective." More than six weeks have since passed with no follow-through in that connection. The last time he was asked about it at a recent press conference, Mr. Roosevelt said that the legislation was not yet ready.

Meanwhile pros and cons of the St. Lawrence controversy continue to get into the appendix to the Congressional Record via the extension-of-remarks route.

### General Ashburn Dead

Major General T. Q. Ashburn, chairman and president of the government-owned Inland Waterways Corporation from the time of its organization in 1924 until November, 1939, died in Washington, D. C., on May 2. As noted in the *Railway Age* of November 18, 1939, page 796, General Ashburn resigned from I. W. C. a few months after its transfer from the War Department to the Department of Commerce; he was succeeded by Chester Thompson.

### Exhibition Tour for the "Tennessean"

The "Tennessean," the Southern's new train between Washington, D. C., and Memphis, Tenn., (via Bristol, Tenn., and the Norfolk & Western), started northbound on a pre-exhibition run out of Memphis on May 6, as was announced in last week's *Railway Age*. Points of display (situated along the regular route which the train will follow), dates and hours open to the public on and after May 10 follow:

Date	Place	Time
10	Knoxville	8 a.m. to 9 p.m.
11	Morristown	8 a.m. to 10 a.m.
11	Greenville	11 a.m. to 1 p.m.
11	Johnson City	3 p.m. to 8 p.m.
12	Bristol	8 a.m. to 8 p.m.
	(Norfolk & Western)	
13	Abingdon	8 a.m. to 10:30 a.m.
13	Glade Spring	8 a.m. to 12:30 p.m.
13	Marion	1 p.m. to 3:30 p.m.
13	Wytheville	4:15 p.m. to 6:45 p.m.
14	Pulaski	7:30 a.m. to 11:30 a.m.
14	Radford	12 p.m. to 4 p.m.
14	Christiansburg	4:30 p.m. to 7 p.m.
15	Roanoke	8 a.m. to 2 p.m.
15	Bedford	2:50 p.m. to 5:50 p.m.
	(Southern)	
16	Lynchburg	8 a.m. to 11:30 a.m.
16	Charlottesville	1 p.m. to 4 p.m.
16	ar. Washington	7 p.m.

### Would Have Canadian Ships Carry Ore Between U. S. Lake Ports

Bills to permit vessels of Canadian and British registry to transport iron ore between United States ports on the Great Lakes during 1941 have been introduced in the Senate and House of Representatives, respectively, by Senator Brown, Democrat of Michigan, and Representative Bland, Democrat of Virginia. The Brown bill is S. 1448 and the Bland bill H. R. 4632.

Speaking in the Senate on May 5, Senator Brown explained that the legislation is proposed so that the Canadian and British vessels may help out on this season's ore movement. Under existing law it is not permissible to carry iron ore from one U. S. port to another U. S. port on the Great Lakes in vessels of Canadian reg-

istry. The Michigan Senator stated that enactment of his bill "is most vital to our defense program"; and he recalled that similar legislation was enacted in 1917 to assist in the ore movement in the World War.

### Club Meetings

V. R. Willoughby, vice-president (engineering), American Car & Foundry Company, will present an illustrated paper entitled "Development of Passenger Train Cars" before the American Society of Mechanical Engineers at the Cleveland Engineering Society, 2130 East 19th street, Cleveland, Ohio.

Henry Dreyfuss, designer of a number of New York Central streamliners will address the New York Chapter of the Railway and Locomotive Historical Society at the Engineering Societies building, New York, on May 16, at 8 P. M. Slides will illustrate the talk.

### N. & W. Coal Drops from 3,800 Cars Daily to 2,300 for the Month

The Norfolk & Western reports that during the entire month of April—while bituminous coal mines were shut down—it moved approximately 2,300 cars out of producing regions which cars represented standing loads filled before the strike started and coal from ground storage. This traffic is in contrast with a normal production on N. & W. lines of about 3,800 cars daily. The road reports that it suffered no shortage of locomotive fuel or coal for industries along its line.

### "Jeffersonian" Christened

The eastbound Jeffersonian, new 20¼-hr. St. Louis-New York-Washington, streamlined luxury coach train of the Pennsylvania, was christened at St. Louis on

April 27, immediately before departure on its run. Miss Jane Howard Smith of St. Louis, christened the train and cut a huge chain of spring flowers, connecting the train's rear coupler with the station bumping post, thus releasing the train for its swift inaugural trip. Miss Smith, who was the 1939 Veiled Prophet Queen, returned from her studies at Bryn Mawr College especially to preside at the christening of the Pennsylvania's new coachliner. Her father, Tom K. Smith, is president of the Boatmen's National Bank. Schedules and equipment of the "Jeffersonian" were described in the *Railway Age* of May 3.

### Pullman Car Dedicated to Frances E. Willard

A new Pullman lounge-parlor car, named for Frances E. Willard, famous women's leader of the nineteenth century, was dedicated at ceremonies in the LaSalle Street station, Chicago, on May 3, under the auspices of the National Women's Christian Temperance Union. The car was placed in service on the New York Central. Those taking part in the ceremonies included Mayor Edward J. Kelly of Chicago and Mayor S. G. Ingraham of Evanston, Ill., the national headquarters of the Union.

### Western Pacific to Move General Offices

The Western Pacific will move its general and executive offices which have been in the Mills building in San Francisco, Cal., since February 1, 1908, to Mission and Ecker streets about October 1. At the same time, the personnel of the general offices and the forces of the general agent of the freight department, now at 244 California street, will be consolidated at the new location. The railroad will have exclusive occupancy of the building on Mis-

sion street which will be known as the Western Pacific Building. This building will be thoroughly modernized by the owners to afford maximum utilization of space and to include the latest type of indirect lighting, acoustical treatment of ceilings in all offices and air-conditioning. A pent house, which will be used as a recreation room by employees, will be erected on the roof.

### B. R. T. Withdraws Complaint on Use of Electric Lanterns

Because the Brotherhood of Railroad Trainmen has withdrawn its complaint the Interstate Commerce Commission has dismissed the proceeding involving the use of electric hand lanterns which had been set for hearing in Washington on May 6. The issue was raised by the B. R. T. contention that the carriers should furnish batteries and bulbs for the electric lanterns; an agreement in that connection has been reached with Western roads and negotiations are under way with the Eastern and Southern lines.

### No Money for National Park Service's Travel Bureau

The \$75,000 originally proposed for the Travel Bureau of the National Park Service was eliminated from the Interior Department appropriation bill for fiscal year 1942 when that bill came recently from the House committee on appropriations. Representative Johnson, Democrat of Oklahoma, who reported the bill explained that the committee felt that the major part of the information supplied by the Travel Bureau could be gotten from automobile associations, hotels and other private bureaus and agencies.

### Rock Island Assails I. C. C.'s Plan

Frank characterization of the plan of reorganization for the Chicago, Rock Island & Pacific promulgated by the Interstate Commerce Commission on October 31, 1940, is presented by President J. E. Gorman in his annual report for 1940. Pointing out that the Commission has found that the stockholders' equity was without value and fixed a capitalization which eliminates them entirely, Mr. Gorman writes: "The Commission apparently has adopted the policy of reducing capitalization arbitrarily to accord with its own estimates of what the future earning power of the carrier will be. In the case of your company, the Commission estimated a normal year's earnings in the future at \$11,000,000, in spite of the fact that for ten years prior to the depression the average available for interest was \$20,047,129.20. This is a disastrous policy for the roads undergoing reorganization, and involves a great danger to the securities of now solvent roads. It certainly will impair railroad credit; for no prudent investor will risk his funds in an enterprise where such treatment is possible.

"One of the most tragic features of it is that the destruction is permanent. The stockholders' equity has gone forever. It is possible that the country some day may emerge from the fog which enshrouds it; but no amount of returning prosperity will resurrect the stockholders' investment . . .



Photo by George Dorrill

The Pennsylvania's All-Coach "Jeffersonian" Was Christened at St. Louis, Mo., on April 27 Just Before Its Initial Run to New York, by Miss Jane Howard Smith of St. Louis. Among Those Participating in the Ceremony Were (Left to Right): P. E. Feucht, General Superintendent, Pennsylvania, Indianapolis, Ind.; W. O. Teufel, Superintendent, Terre Haute; Carl Glessow, St. Louis Chamber of Commerce; T. K. Smith, President, Boatmen's National Bank; Miss Smith; F. M. Ware, Assistant General Passenger Agent, St. Louis; Mrs. Smith; and Major C. E. McCullough, General Passenger Agent, Chicago



In all of these proceedings, your company has been represented by counsel, and you may be assured that your board of directors and your officers will use their utmost endeavors in the coming court proceedings to see that some recognition is preserved for your investment in these properties."

### **Pennsylvania Greyhound Shut-Down by Strike**

A complete tie-up of service on inter-city bus lines of Pennsylvania Greyhound Lines started on the morning of May 4 when 1,400 employees of the company, including drivers, terminal employees and maintenance men went on strike. Strikers, who are members of the A. F. of L.-affiliated Amalgamated Association of Street, Electric Railway & Motor Coach Employees, demand a closed shop, improved working conditions and an increase to 5 cents-per-mile basic pay for drivers now receiving 4 and 4.15 cents.

At time of writing government mediation officers had failed to get acceptance of a basis of agreement. Capital stock of Pennsylvania Greyhound is owned 50 per cent by the American Contract & Trust Co., a wholly-owned affiliate of the Pennsylvania Railroad, and 50 per cent by the Greyhound Corporation, top-management company of the Greyhound system. Its routes follow main lines of the railroad generally between New York and St. Louis, Mo. Regular service is conducted over 5,646 mi. of highway; in 1939, Pennsylvania Greyhound carried 5,741,054 passengers (excluding special and charter).

### **Seward to Lose Alaska Railroad Terminals**

Concern for the plight of the people of Seward, Alaska, after the transfer to another point of the seaboard terminus of the Alaska Railroad, was expressed by the House committee on appropriations in its recent report on the Interior Department appropriation bill for the fiscal year ending June 30, 1942. The recently-approved fifth supplemental national defense appropriation bill carried an item of \$5,300,000 for relocation of the Southern end of the railroad from Seward to a point near the head of Passage Canal.

The change which was urged by the Secretary of War as a national defense measure involves the building of 14 miles of new line and the abandonment of 66 miles as well as the Seward terminal facilities. The report on the Interior Department bill suggested that the line into Seward might well be maintained even after the new terminal facilities are built. In the event of abandonment, the report mentions an alternative suggestion that new highway facilities be constructed to connect Seward with Anchorage, thus compensating "in part" for the loss of connection by railroad.

### **C. & W. I. Moves Tracks for Air Port**

The final phase of the co-operation of the Chicago & Western Indiana and the Belt Railway of Chicago in Chicago's plan for an enlarged airport was enacted on May 1, when the C. & W. I. was given title to a new right of way and operated its first

train over it. Ceremonies marking the completion of the new right of way and the removal of the tracks of the old one which were located on the proposed airport were held on May 1, when the first train was operated over the new line. This train carried the mayor of Chicago, railway officers, politicians, officers of air lines and representatives of the press.

As the train entered the new right of way, Mayor Kelly of Chicago and M. F. Stokes, president and general manager of the C. & W. I., drove a golden spike to commemorate the completion of the new tracks. "We have co-operated in this enterprise to make Chicago's airport the greatest air field in the country," the mayor told Mr. Stokes. "The city is particularly thankful to you for your help because we realize that the railroads and the air lines are competitors. I believe, and I am sure that most other citizens believe, that the railroads and the air lines can work together in making this city not only the railroad center of the world but also the air line center as well."

### **April Employment 9.73 Per Cent Above 1940**

Railroad employment increased another 2.91 per cent—from 1,050,373 to 1,080,896—during the one-month period from mid-March to mid-April, while the April total was 9.73 per cent above that for April, 1940, according to the Interstate Commerce Commission's compilation based on preliminary reports. The index number, based on the 1935-1939 monthly average as 100 and corrected for seasonal variation, stood at 106.8 for April, as compared with March's 105.9 and April, 1940's 97.3.

April employment in all groups was above both the previous month and the

comparable month last year. The largest increase over March was the 11.97 per cent rise in the maintenance of way and structures group; and next in turn came the 1.61 per cent increase in the maintenance of equipment and stores group and the 1.14 per cent increase in the group embracing transportation employees, other than train, engine and yard. All other increases over March were less than one per cent.

Increases over April, 1940, included the following: Maintenance of way and structures, 12.36 per cent; maintenance of equipment and stores, 12.27 per cent; train and engine service, 10.22 per cent; yardmasters, switch-tenders and hostlers, 7.46 per cent; transportation, other than train, engine and yard, 7.3 per cent; professional, clerical and general, 4.45 per cent; executives, officials, and staff assistants, 1.93 per cent.

### **Senator Thomas Still Wants Probe of Wage Plans for Red Caps**

Investigation by the Wage and Hour Division, Department of Labor, of practices adopted by railroads and terminal companies as a result of the application of the minimum-wage provisions of the Fair Labor Standards Act to red caps is called for in Senate Resolution 105 which was introduced recently by Senator Thomas, Democrat of Utah, and reported favorably on May 5 from the Senate committee on education and labor. As the committee report said, the resolution is substantially in the same form as the one sponsored by Senator Thomas in the closing session of the previous Congress.

The committee report asserted that the conditions and practices of employment of red caps "have been productive of many complaints made by members of the traveling public and by the red caps." The

\* \* \*



**Twelve-Ton Light Combat Tanks Roll Off the Assembly Line of the American Car & Foundry Company's Plant at Berwick, Pa., At the Rate of 9 Tanks Per Day. By July 15 Rate Will Be 15.**

Administrator of the Wage and Hour Division is directed by the resolution to report to the Senate on the extent to which red cap employment conditions "violate the letter or spirit" of the Fair Labor Standards Act or other federal statutes, "if at all"; the extent to which such conditions and practices are susceptible to regulation under the Fair Labor Standards Act in its present form; and on what legislation, if any, should be enacted for the purpose of further regulating wages, hours, and other conditions and practices of employment of red caps under the Fair Labor Standards Act.

### March Locomotive Shipments

March shipments of railroad locomotives totaled 82 as compared with 44 in February and 42 in March, 1940, according to reports received from builders by the Bureau of the Census, U. S. Department of Commerce. Shipments for this year's first three months totaled 190 locomotives as compared with 107 in 1940's first quarter; while unfilled orders at the end of March totaled 645 locomotives as compared with 139 as of March 31, 1940.

The 190 locomotives shipped during this year's first quarter included 31 steam, 132 Diesel-electrics and 12 of other types for domestic service, and seven steam and eight electric for export. The 645 involved in the unfilled orders as of March 31 included 196 steam, eight electric, 357 Diesel-electrics and 41 of other types for domestic service, and 23 steam, 17 electric, one Diesel-electric and two of other types for export.

Data supplied by the Car Service Division, Association of American Railroads, on locomotive building in railroad shops show that two locomotives (one steam and one electric) were thus produced in March, as compared with seven (four steam and three electric) in March, 1940. During this year's first three months, there were four locomotives (two steam and two electric) built in railroad shops, as compared with 11 (eight steam and three electric) during 1940's first quarter. On April 1, railroad shops had unfilled orders for 23 locomotives, including 18 steam and five electric.

### New Scrap Price Schedule

A revised schedule fixing maximum prices for scrap iron and steel was issued May 6 by Leon Henderson, administrator, Office of Price Administration and Civilian Supply. The new schedule, which became effective May 6, replaces price schedule No. 4 issued April 3.

The revision was made "in order to eliminate inequities inherent in the original schedule, to aid in insuring an even flow of scrap to consumers, and to clarify the original schedule."

Among the more important changes are:

Classifications are established for several grades of scrap in addition to the 16 grades set up in the original schedule. Maximum prices for nearly all these grades of scrap are established for each of 34 consuming points as against only 13 in the original schedule.

Provision has been made to aid con-

sumers not located on the line of a railroad to obtain scrap from that road. This has been done by permitting an off-the-line consumer, who has purchased scrap from the railroad in question in the past, to pay the maximum prices established for a consumer on-the-line plus not more than one dollar to defray the expense of the off-the-line haul. An off-the-line consumer may also pay the maximum price established for the nearest consuming point even if such price is higher than the on-the-line price plus the one dollar for off-the-line hauling expense.

Disadvantages resulting from the fact that switching charges may differ at different points on a railroad's line are eliminated. This is done by placing consumers in different switching districts on the same railroad on a parity insofar as their ability or inability to purchase railroad scrap has

heretofore been determined by the amount of the switching charges of the railroad from which the scrap originated.

Provision is made for sale of railroad scrap, for which the railroad of origin cannot be identified, at prices not in excess of the maxima established for similar grades of non-railroad scrap.

The new schedule requires railroads to take care of their regular on-the-line customers before shipping their scrap to consumers located off-the-line.

### February's Net Income Was \$14,964,005

Class I railroads reported for February a net income after fixed charges of \$14,964,005 as compared with a net deficit of \$10,094,640 in February, 1940, according to the Interstate Commerce Commission's monthly compilation of selected income and

### SELECTED INCOME AND BALANCE-SHEET ITEMS OF CLASS I STEAM RAILWAYS

Compiled from 132 Reports (Form IBS) Representing 137 Steam Railways

(Switching and Terminal Companies Not Included)

Income Items	All Class I Railways			
	For the month of February		For the two months of	
	1941	1940	1941	1940
1. Net railway operating income .....	\$58,478,876	\$32,856,486	\$120,836,279	\$78,869,297
2. Other income .....	10,077,730	10,184,902	21,939,682	21,934,781
3. Total income .....	68,556,606	43,041,388	142,775,961	100,804,078
4. Miscellaneous deductions from income..	2,229,446	2,286,382	4,659,215	4,659,381
5. Income available for fixed charges .....	66,327,160	40,755,006	138,116,746	96,144,697
6. Fixed charges:				
6-01. Rent for leased roads and equip-				
ment .....	12,032,520	10,515,640	24,289,741	21,561,530
6-02. Interest deductions <sup>1</sup> .....	37,223,261	38,236,997	74,947,462	76,686,047
6-03. Other deductions .....	117,706	131,231	238,383	262,903
6-04. Total fixed charges .....	49,373,487	48,883,868	99,475,586	98,510,480
7. Income after fixed charges .....	16,953,673	*8,128,862	38,641,160	*2,365,783
8. Contingent charges .....	1,989,668	1,965,778	3,972,496	3,931,556
9. Net income .....	14,964,005	*10,094,640	34,668,664	*6,297,339
10. Depreciation (Way and structures and equipment) .....	17,638,334	16,827,666	35,295,147	33,699,280
11. Federal income taxes .....	6,442,547	2,569,074	13,200,675	5,944,537
12. Dividend appropriations:				
12-01. On common stock .....	12,891,829	13,464,076	15,507,810	16,884,955
12-02. On preferred stock .....	2,583,411	2,631,224	3,119,847	4,425,635
Ratio of income to fixed charges (item 5 ÷ 6-04) .....	1.34	.83	1.39	.98
Selected Asset and Liability Items				
13. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707) .....	All Class I Railways			
	Balance at end of February		1941	
			1941	1940
13. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707) .....			\$560,032,172	\$623,464,761
14. Cash .....			\$674,630,090	\$526,618,698
15. Temporary cash investments .....			71,888,388	47,613,124
16. Special deposits .....			156,409,126	98,089,181
17. Loans and bills receivable .....			1,592,250	1,245,224
18. Traffic and car-service balances—Dr. .....			28,896,619	26,688,358
19. Net balance receivable from agents and conductors .....			56,620,166	45,016,137
20. Miscellaneous accounts receivable .....			135,331,336	122,775,060
21. Materials and supplies .....			356,648,514	357,054,175
22. Interest and dividends receivable .....			15,834,004	17,062,788
23. Rents receivable .....			1,162,326	1,053,916
24. Other current assets .....			5,522,191	4,574,292
25. Total current assets (items 14 to 24) .....			1,504,535,010	1,247,790,973
26. Funded debt maturing within 6 months <sup>2</sup> .....			\$137,349,614	\$193,543,362
27. Loans and bills payable <sup>3</sup> .....			\$81,469,014	\$158,528,510
28. Traffic and car-service balances—Cr. .....			47,270,923	42,174,715
29. Audited accounts and wages payable .....			257,228,972	244,075,253
30. Miscellaneous accounts payable .....			52,182,376	59,978,967
31. Interest matured unpaid .....			38,716,871	22,643,520
32. Dividends matured unpaid .....			1,541,672	1,574,323
33. Unmatured interest accrued .....			87,432,960	86,760,508
34. Unmatured dividends declared .....			16,468,346	15,406,008
35. Unmatured rents accrued .....			23,605,127	24,069,482
36. Accrued tax liability .....			212,458,239	189,751,543
37. Other current liabilities .....			50,657,451	29,387,368
38. Total current liabilities (items 27 to 37) .....			869,031,951	874,350,249
39. Analysis of accrued tax liability:				
39-01. U. S. Government taxes .....			105,568,049	73,430,540
39-02. Other than U. S. Government taxes .....			106,890,190	116,321,003

\* Deficit or other reverse items.

<sup>1</sup> Represents accruals, including the amount in default.

<sup>2</sup> Includes payments of principal of long-term debt (other than long-term debt in default) which will become due within six months after close of month of report.

<sup>3</sup> Includes obligations which mature not more than 2 years after date of issue.



## NET INCOME OF LARGE STEAM RAILWAYS

(Switching and Terminal Companies Not Included)

Name of railway	Net income after Depreciation		Net income before Depreciation	
	For the two months of		For the two months of	
	1941	1940	1941	1940
Alton .....	\$165,635	\$339,012	\$120,494	\$296,059
Atchison, Topeka & Santa Fe <sup>1</sup> .....	1,790,306	1,014,308	3,796,553	946,841
Atlantic Coast Line .....	2,396,264	681,938	2,784,569	1,020,791
Baltimore & Ohio .....	1,442,390	1,500,355	2,687,531	305,613
Boston & Maine .....	663,731	160,098	900,694	80,752
Central of Georgia <sup>2</sup> .....	447,877	547,529	2,101	406,019
Central of New Jersey <sup>2</sup> .....	447,112	430,405	226,879	196,621
Chesapeake & Ohio .....	4,387,823	5,222,881	5,815,026	6,627,526
Chicago & Eastern Illinois .....	236,701	218,515	339,690	117,799
Chicago & North Western <sup>2</sup> .....	1,390,437	2,899,946	583,442	2,072,955
Chicago, Burlington & Quincy .....	1,723,569	57,253	2,638,036	807,232
Chicago Great Western .....	62,482	232,970	156,128	140,192
Chicago, Milwaukee, St. Paul & Pacific <sup>2</sup> .....	367,516	1,814,158	643,344	837,838
Chicago, Rock Island & Pacific <sup>2</sup> .....	346,731	1,789,456	380,282	1,108,602
Chicago, St. Paul, Minneapolis & Omaha .....	414,759	529,045	323,266	434,352
Delaware & Hudson .....	302,920	169,024	494,114	343,530
Delaware, Lackawanna & Western .....	416,382	115,919	828,804	284,280
Denver & Rio Grande Western <sup>2</sup> .....	801,739	822,969	585,613	615,437
Elgin, Joliet & Eastern .....	1,045,332	506,498	1,249,374	662,509
Erie (including Chicago & Erie) <sup>3</sup> .....	824,485	589,038	1,434,682	11,215
Grand Trunk Western .....	196,142	114,942	391,628	84,518
Great Northern .....	2,152,987	2,229,904	1,442,457	1,617,748
Illinois Central .....	1,671,875	93,494	2,787,467	1,148,212
Lehigh Valley .....	412,686	235,613	747,910	115,323
Long Island .....	380,483	533,707	120,627	339,127
Louisville & Nashville .....	2,344,009	1,131,298	3,090,170	1,848,270
Minneapolis, St. Paul & Sault Ste. Marie <sup>2</sup> .....	1,227,612	1,192,686	1,014,485	988,190
Missouri-Kansas-Texas .....	431,675	652,152	239,280	450,997
Missouri Pacific <sup>2</sup> .....	362,307	1,883,689	388,692	1,136,786
New York Central <sup>5</sup> .....	3,424,546	181,442	6,446,406	2,824,315
New York, Chicago & St. Louis .....	1,115,284	337,090	1,390,870	601,853
New York, New Haven & Hartford <sup>2</sup> .....	99,319	936,637	654,551	387,141
Norfolk & Western .....	5,315,425	5,423,337	6,418,503	6,442,657
Northern Pacific .....	1,054,962	1,580,076	486,224	1,023,047
Pennsylvania .....	5,260,427	3,767,479	9,826,349	8,073,370
Pere Marquette .....	672,936	419,750	1,050,313	802,510
Pittsburgh & Lake Erie .....	788,668	549,883	1,177,698	914,561
Reading .....	1,334,438	713,756	1,840,392	1,232,655
St. Louis-San Francisco <sup>2</sup> .....	541,085	1,884,281	38,605	1,377,168
St. Louis, San Francisco & Texas .....	25,641	86,545	25,641	86,406
St. Louis Southwestern <sup>2</sup> .....	431,008	24,795	539,404	80,172
Seaboard Air Line <sup>1</sup> .....	225,916	557,057	630,259	175,750
Southern .....	1,870,499	23,761	2,467,705	611,867
Southern Pacific <sup>6</sup> .....	2,263,464	2,267,052	3,599,677	939,094
Texas & Pacific .....	385,499	126,691	596,497	328,478
Union Pacific (including leased lines) .....	468,967	1,070,373	1,811,113	2,333,496
Wabash <sup>1</sup> .....	122,353	658,548	484,123	299,747
Yazoo & Mississippi Valley .....	242,578	14,440	154,265	61,022

\* Deficit.

<sup>1</sup> Report of receiver or receivers.<sup>2</sup> Report of trustee or trustees.<sup>3</sup> Under trusteeship, Erie only.<sup>4</sup> Includes Atchison, Topeka & Santa Fe, Gulf, Colorado & Santa Fe, and Panhandle & Santa Fe.<sup>5</sup> Includes Boston & Albany, lessor to New York Central.

<sup>6</sup> Includes Southern Pacific, Texas & New Orleans, and leased lines. The report contains the following information: "Figures reported above for Southern Pacific Transportation System exclude offsetting debits and credits for interest on funded securities and rentals for leased properties between companies included therein. Operations for 1941 of separately operated Solely Controlled Affiliated Companies (excluding results for Southern Pacific Railroad Company of Mexico), not included in above statement, resulted in a net loss of \$417,237 for the month and \$755,073 for the period. These results include \$217,608 for the month and \$433,313 for the period, representing interest on bonds of such companies owned by Southern Pacific Company not taken into income by S. P. Co. and, therefore, not included in the 1941 income results for the System reported above. The combined results for 1941 for Southern Pacific Transportation System and separately operated Solely Controlled Affiliated Companies (excluding S. P. R. Co. of Mexico) amounted to a net income of \$898,704 for the month and \$1,941,804 for the period. Figures herein given exclude results of Southern Pacific Railroad Company of Mexico for the reason that policy was adopted January 1, 1940 of making no further advances to that company, it being required to conduct its operations entirely within its own resources."

balance sheet items. The year's first two months showed a net income of \$34,668,664 as compared with a net deficit of \$6,297,339 for the first two months of 1940.

The roads not in receivership or trusteeship had a net income for February of \$17,755,161 as compared with \$672,300 for the same month of last year; while the net income for the first two months of this year was \$40,161,170 as contrasted with \$11,931,050 for the same period last year.

Seventy-eight roads reported net incomes for February, while 51 reported net deficits; in February, 1940, there were 58 net incomes and 71 net deficits. For the first two months of this year 81 reported net incomes and 48 had net deficits, as compared, respectively, with 61 net incomes and 68 net deficits in the first two months of 1940.

The consolidated statement for all Class I roads and that showing net incomes or

deficits of "large steam railways" are given in the accompanying tables.

### Another Year—the 14th—With No Death from Transport of Explosives

For the fourteenth consecutive year the railroads of the United States and Canada in 1940 transported without fatality approximately 600,000,000 pounds of high explosives, which includes among other things dynamite, black and smokeless powder, explosive ammunition, and blasting caps, according to the Bureau of Explosives of the Association of American Railroads.

Only three minor accidents in which one person was injured took place in 1940 in connection with the transportation by rail of explosives in both Canada and the United States, according to the Bureau. Two of the accidents were slight explosions resulting from the handling of toy

torpedoes. The third accident was due to a fire of unknown origin in a freight house, which resulted in the explosion of 1,000 blasting caps. Five hundred pounds of dynamite, awaiting removal by the consignee, was burned but did not explode.

In addition, the railroads in 1940 also transported great quantities of other dangerous articles such as gasoline, acids and corrosive liquids, inflammable liquids, inflammable solids, poisonous articles and compressed gases, with only two fatalities and injury to 74. One fatality resulted from the explosion of anhydrous ammonia when a freight warehouse caught fire. The other fatality resulted from an explosion which occurred when an empty tank car, formerly loaded with crude oil, was being cleaned. Only eight accidents, all without fatalities, involving transportation of gasoline were reported in 1940, the best record for many years.

### March Accident Statistics

The Interstate Commerce Commission on May 7 made public its Bureau of Statistics' preliminary summary of steam railway accidents for March and this year's first three months. The tabulation, which is subject to revision, follows:

Item	Month of March		3 months ended with March	
	1941	1940	1941	1940
Number of train accidents .....	735	578	2,020	1,949
Number of casualties in train, train-service and nontrain accidents:				
Trespassers:				
Killed .....	121	148	338	357
Injured .....	130	135	350	334
Passengers on trains:				
(a) In train accidents:				
Killed .....	4	....	4	1
Injured .....	148	17	332	223
(b) In train-service accidents:				
Killed .....	....	....	....	1
Injured .....	139	143	414	405
Travelers not on trains:				
Killed .....	....	1	1	2
Injured .....	83	79	243	245
Employees on duty:				
Killed .....	57	33	164	141
Injured .....	1,759	1,397	4,861	4,668
All other nontrespassers:				
Killed .....	173	209	568	576
Injured .....	591	541	1,875	1,869
Total—All classes of persons:				
Killed .....	355	391	1,075	1,078
Injured .....	2,850	2,312	8,075	7,744

\* Train accidents (mostly collisions and derailments) are distinguished from train-service accidents by the fact that the former cause damage of more than \$150 to railway property.

\*\* Casualties to "Other nontrespassers" happen chiefly at highway grade crossings. Total highway grade-crossing casualties for all classes of persons, including both trespassers and nontrespassers, were as follows:

Persons:	1941	1940	1939	1938
Killed .....	158	186	527	537
Injured .....	435	396	1,381	1,433

### Port of N. Y. Reviews Progress Since 1918

To review progress in transportation and industry in the port of New York since 1918 and dedicate the port zone to the national defense program, the Chambers of Commerce of New York and New Jersey and the Port of New York Authority sponsored an intensive program of celebrations, dinners, radio programs, exhibits and window displays from April 27 to 30, inclusive. A major event on the program was the award of silver medals to the

oldest employees in each of twelve key occupations in the business of the port. Among these were Joseph H. Black, 76-year-old barge captain, still on active duty for the Baltimore & Ohio, cited as the "oldest master of a non-self-propelling harbor craft plying the waters of the port district"; and Thomas J. May, 74-year-old locomotive engineer employed by the Staten Island Rapid Transit (B. & O. subsidiary) since 1898, who qualified as the "oldest person working in railroad freight yards in the port district."

In connection with the port dedication program, the Port Authority issued a colorful 86-page booklet, 10 in. by 13 in., describing chiefly in photographs, drawings, charts and maps all aspects of port transportation activities. Among other things, railroad facilities at each of the "ports within a port," such as Elizabethport, N. J., Perth Amboy, and Bayonne, are described briefly; expedited freight services of roads serving New York are dramatized by means of a zone time-distance chart, and the unique system of car-float transportation whereby "every railroad reaches every ship" is analyzed briefly. Also, the Authority's studies of railroad co-ordination in the district and operations of its inland (off line) railroad freight station are summarized and its future plans for suburban rapid transit and a cross-bay freight tunnel outlined.

### Railway Tie Association

The Railway Tie Association will hold its twenty-third annual meeting at the Arlington Hotel, Hot Springs, Ark., on May 21-22. The convention will open at 11:30 on Wednesday morning with reports of officers, followed by an address on A Tie, by P. J. Watson, Jr., president of the Terminal Railroad Association of St. Louis, and the report of the Committee on Moisture Gradient, of which W. P. Arnold, Wood Preserving Division, Koppers Company, Orville, Ohio, is chairman.

On Thursday morning addresses will be presented on Cross Tie Specifications, by C. D. Turley, chief tie inspector, Illinois Central, Chicago; and on The Industry's Present Position, by William Somerville, vice-president, Potosi Tie & Lumber Company, Dallas, Tex. At this session, committees will also report on Checking and Splitting, R. R. Poux (chairman), Erie, Marion, Ohio; Timber Conservation, R. H. White, Jr. (chairman), Southern Wood Preserving Company, Atlanta, Ga.; Mechanical Equipment, W. D. Humphreys (chairman), Wood Preserving Division, Koppers Company, Pittsburgh, Pa.; Changes of Dimensions of Cross Ties During the Seasoning Period, R. M. Clayton (chairman), Southern Wood Preserving Company, Atlanta, Ga.; Specifications, D. C. Jones (chairman), vice-president, Wood Preserving Division, Koppers Company, Chicago; Legislation, B. N. Johnson (chairman), Wood Preserving Division, Koppers Company, Richmond, Ind.; and Statistics, G. D. Callicot (chairman), vice-president, Potosi Tie & Lumber Company, St. Louis, Mo.

The annual banquet will be held on Wednesday evening, at which Col. Robert S. Henry, assistant to the president of the

Association of American Railroads, will speak on A Cycle of Twenty Years.

## Savings Bankers View RR Outlook

(Continued from page 811)

industry the continuation of control by it of the methods for accomplishing the job it is called upon to do. I have every confidence that the industry can, and will meet, and fully discharge its great obligation."

Philip A. Benson, president of the Dime Savings Bank, Brooklyn, N. Y., declared: "It has been more years than most of us can remember when the railroads of the United States were operating at something like their national capacity. Once more we see operating figures and earnings statements begin to approach a reasonable standard. This is heartening news for investors and of even broader consequence to the nation at large, because we have learned anew in the hour of emergency that the railroads constitute our most essential industry, one that has been much abused and neglected, but which now is returning to its rightful place as our fundamental and indispensable method of transportation. It is my hope that, out of the present intensive activity, we may shape the future of the railroads in such a way that they will perform their rightful functions with a minimum of interference by Government or labor, and a maximum of benefits to the people of the United States."

"Because of better earnings, the immediate outlook for the railroads distinctly has improved. The pressure of insufficient earnings to cover fixed charges upon certain of the marginal roads has been removed for the present, and, although further reorganizations seemed imminent last year, the probability of further reorganizations now seems much more remote. In one instance, where a probable default in interest payments on May 1 of this year had been announced the latter part of last year, and either a reorganization proceeding or voluntary readjustment had been anticipated, it recently has been announced that interest payment will be made. In other cases, where carriers have been considered fairly close to reorganization, improved earnings have been such as to remove immediate danger."

C. L. Raper, dean of the College of Business Administration, Syracuse University, pointed out the fallacies in the St. Lawrence Seaway project, emphasizing chiefly the fact that a surplus of transportation already exists in the country. Said he: "To spend a great amount of taxpayers' money for more transportation in a region where transportation is too abundant, seems to me indefensible. The government not only would be wasting public money, but it also would be setting up unfair competition for existing private carriers, unless tolls levied for use of the seaway were substantial—sufficient to pay a fair return upon the investment as well as the cost of operation of the locks. The gains in lower transportation rates for certain goods, which the advocates claim, will, I think,

prove to be in the same class as the designers' estimate of traffic—grossly overestimated."

Speaking also of grandiose super-highway schemes, Dean Raper asserted:

"We are urged to build six trans-continental trunk highways—three from East to West and three from North to South. The facts of present traffic and the estimates of future traffic for trans-continental motor vehicles prove one thing—that there is no real need for such highways. No such trunk highways should be constructed unless we cannot escape the urge to waste more of the taxpayer's money . . . The federal government has been spending large sums from its treasury to eliminate a surplus condition in wheat, cotton and other commodities. At the same time it has been spending taxpayers' money to create a large surplus of transportation facilities. For some reason we have not recognized the contradiction."

## Uncle Sam Ought To Buy the Cars

(Continued from page 812)

petitors, because they have rates now which are in general on a more favorable basis than that, this being the cause of the complaints from the Northern operators which we have had occasion to consider in the past. What the Southern operators want it still more favorable rates, chiefly on the ground, I presume, of the low costs and prosperity of some of the more important railroads which serve them."

Mr. Eastman also told his audience that the commission had been criticized by two groups regarding its policy of "depression-proof" capital structures for reorganized railroads, those who felt that the new capital structures were not pared down enough and those who believed that stockholders had been treated too roughly by having their holdings wiped out.

"Between these two fires of criticism", he went on to say, "the commission has steered a median course, and I believe that the policies which it has pursued have on the whole been sound. Of course, however, it is impossible to forecast with entire accuracy the future earning power of the railroads, and events have at times seemed to lend support to the critics first on one side and then on the other. Those who thought we were too liberal were given such support in 1938 when, after a rather steady upward trend, the bottom fell out of railroad earnings and they dropped again to low depths. At present the critics of the other type are finding support in the current earnings, which are way beyond any reasonable expectations which were entertained in any quarter only a comparatively short time ago."

After pointing out that these increased earnings are the direct result of the war and the rearmament program and are not economically sound, Mr. Eastman concluded by saying, "I leave the question with you—and you can answer it as well and probably better than I—whether, if we look further into the future, this temporary access of railroad prosperity furnishes any



sound reason for believing that our re-organization plans are unduly severe and ought to be revised upward, so to speak, on a scale of greater liberality."

### Freight Car Loading

Loading of revenue freight for the week ended May 3 totaled 794,301 cars, the Association of American Railroads announced on May 8. This was an increase of 72,599 cars, or 10.1 per cent, over the preceding week, an increase of 128,754 cars, or 19.3 per cent, above the same week in 1940; and an increase of 222,276 cars, or 38.9 per cent, above the comparable week in 1939.

As reported in last week's issue, the loadings for the previous week ended April 26, totaled 721,702 cars, and the summary for that week as compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loading			
For Week Ended Saturday, April 26			
Districts	1941	1940	1939
Eastern .....	160,102	141,774	136,700
Allegheny .....	154,993	130,974	106,518
Pocahontas .....	16,814	46,523	14,140
Southern .....	106,762	99,109	94,377
Northwestern ..	127,368	83,534	80,505
Central Western	106,641	97,899	104,659
Southwestern ..	49,022	44,991	48,291
Total Western			
Districts ....	283,031	226,424	233,455
Total All Roads	721,702	644,804	585,190
Commodities			
Grain and grain products ....	33,743	35,936	35,229
Live stock .....	12,523	12,352	14,106
Coal .....	39,179	117,338	74,757
Coke .....	9,148	7,871	5,397
Forest products.	40,522	33,718	29,253
Ore .....	75,436	20,881	15,890
Merchandise l.c.l.	162,055	148,637	153,432
Miscellaneous ..	349,096	268,071	257,126
April 26 .....	721,702	644,804	585,190
April 19 .....	708,651	628,468	557,867
April 12 .....	679,808	619,105	547,179
April 5 .....	683,402	602,835	534,952
March 29 .....	792,125	628,921	600,691
Cumulative Total,			
17 Weeks ...	12,175,764	10,665,742	9,773,439

**In Canada.**—Carloadings for the week ended April 26 totaled 60,593, as compared with 56,321 in the previous week and 50,636 in the corresponding week last year, according to the Dominion Bureau of Statistics.

	Total Cars Loaded	Total Cars Rec'd from Connections
Total for Canada:		
April 26, 1941 .....	60,593	27,782
April 19, 1941 .....	56,321	27,310
April 12, 1941 .....	54,974	28,216
April 27, 1940 .....	50,636	25,094
Cumulative Totals for Canada:		
April 26, 1941 .....	931,067	488,718
April 27, 1940 .....	806,297	414,485
April 29, 1939 .....	701,621	359,762

### Two Florida Roads Show Big Increases in Passenger Traffic

The 1940 annual reports of the Atlantic Coast Line and Seaboard Air Line indicate unusually high increases in passenger traffic and revenues due to improvement of equipment in through Florida service. Both roads also show a substantial increase in freight traffic and an improvement in the portion of Florida perishable traffic hauled by the railroads.

Passenger revenues of the Atlantic Coast Line in 1940 were 21 per cent higher than that of the previous year. The number of revenue passengers carried one mile increased 31 per cent and average-miles-per-revenue-passenger in 1940 were 236.46, as compared with 207.19 in 1939 and 210.84

in 1938. While the increase in traffic represented new coach business chiefly, traveling in Pullman sleeping cars continued to maintain the level of the previous year. General service improvements also affected short-haul travel under 100 mi. which increased approximately 5.5 per cent over the previous year.

Freight revenues in 1940 increased 4 per cent and revenue tons carried, 21 per cent over 1939. President G. B. Elliott pointed out that while the freeze of January, 1940, cut the total crop of citrus fruits in Florida severely, the railroads moved 62.95 per cent of the total number of boxes shipped out of the state in the 1939-1940 season, as compared with 56 per cent in the previous year. Products trucked out of the state increased from 16.95 per cent to 22.7 per cent, while truck-boat traffic declined from 27.05 per cent of the total to 14.98 per cent. To aid in the development of fruit and vegetables in its territory the Coast Line assembled and distributed to wholesale buyers in other sections data showing shipping points and approximate dates different crops were expected to be ready for shipment.

Passenger revenues of the Seaboard Air Line increased 19.2 per cent over 1939. Freight revenue increased 8.4 per cent. The annual report noted that of the combined all-rail and truck-boat movement of citrus fruits from Florida to north Atlantic ports, the railroads handled during 1940 a larger percentage than in any one year since the advent of active and substantial boat competition.

### B. of L. F. & E. Chief Blasts St. Lawrence Project

Dubbing the St. Lawrence Waterway project a "crime" and a "direct detriment to defense efforts," D. B. Robertson, president, Brotherhood of Locomotive Firemen & Enginemen, picks out the jokers in President Roosevelt's project, in a feature article appearing in the May issue of the Brotherhood magazine. The two latest "white-washing" reports put out by the Department of Commerce he describes as seeming "to strain for conviction through the employment of convenient minimums and averages which might easily be affected by bad conditions of climate, hard-headed port officials, and ship-loving skip-pers."

As for the inland shipbuilding feature, Mr. Robertson ventures to ask "in what war it might be intended to use the inland-built ships? Will it be in 1947, '48, or now?" And, he adds, any ship built would be at the mercy of the enemy agents and saboteurs for literally hundreds of miles along her way from the lakes to the sea. He concludes, "With the great advance made since the last World War in rail facilities and pre-fabrication of parts and important sub-assemblies there is no need to spend hundreds of millions of dollars on a waterway requiring years to complete in order to build a few ships in the Middle West under conditions of doubtful safety."

On the whole, the writer considers the project an attack upon United States and Canadian labor which "cannot be justified or minimized by anyone who will take the trouble to analyze the factors involved."

Expanding on this subject he writes, "The diversion of traffic from existing and established transportation systems which have been proved time and again to be more than adequate, means that probably millions of man-hours of labor now economically employed in the transportation systems may be jeopardized in competition with the underpaid foreign merchant marine crews. Moreover, the billions of dollars of investments now tied up in these transportation systems will be equally threatened through a loss of traffic and a consequent drop in income which will affect volume of employment, pay rolls, and values. Equally maddening will be the necessity for maintenance of facilities for standby service to take up the load and serve the communities when the seaway is not open to subsidized foreign shipping."

### Would Authorize \$479,000,000 for Rivers and Harbors

Rivers and harbors projects estimated to cost a total of \$281,872,650 have been approved by the House committee on rivers and harbors which has also voted to report a separate measure authorizing completion of the Florida ship canal at an estimated cost of about \$198,000,000. The largest of the items approved for the omnibus bill, which will be framed and reported to the House in the near future, is the proposed Tennessee-Tombigbee waterway, estimated to cost \$66,000,000.

Other major projects on the list of those to be included in the forthcoming bill are: East River, New York, \$34,509,000; Savannah River below Augusta, Ga., and Clark Hill Reservoir, \$28,000,000; Illinois Waterway, and Indiana Harbor Canal and Harbor, Ill., and Ind., \$25,900,000; Umatilla Dam, \$23,700,000; Connecticut River between Hartford, Conn., and Holyoke, Mass., \$13,344,000; Mississippi River between the Ohio and the Missouri, \$10,290,000; Warrior and Tombigbee rivers, Ala., and Miss., \$6,750,000; Apalachicola, Chattahoochee and Flint rivers, Ga., and Fla., \$6,500,000; Missouri river below Sioux City, Iowa, \$6,000,000.

Speaking in the House on May 2 Representative Young, Democrat of Ohio, expressed surprise at the rivers and harbors committee's action approving the Florida ship canal. "It is high time, particularly in this period of grave national emergency," Mr. Young went on, "that we give scrupulous attention and greatest consideration to the American taxpayer . . . It is my judgment that national-defense projects must go forward and that projects involving huge expenditures such as the Florida ship canal and the St. Lawrence seaway project had better be left for consideration when happier times return."

A couple of days before Mr. Young spoke, the Florida canal had been defended by Representative Green, Democrat of Florida, sponsor of H. R. 4552 which provides for completion of the project. Mr. Green hoped that the action of the committee on rivers and harbors would be supported by all members of the House "who are interested in full and complete national defense of the Caribbean area and the Panama Canal, together with the facilitation of economic transportation . . ."

## Equipment and Supplies

### Railroads Speed Equip. Buying

Over 16,000 freight cars ordered in April; more than 100,000 in last 12 months

Spurred by rising estimates of prospective loadings and the need to meet heavier demands for transportation as the defense program accelerates, the railroads continue to push new equipment contracts, the volume of which has assumed boom proportions. During the month of April, purchases for domestic service reported in the *Railway Age* totaled 68 locomotives (one steam and 67 Diesel-electric), 16,091 freight cars and 33 passenger-train cars. Of the 68 locomotives ordered, railroad companies purchased 52, industrial companies 14 and the United States Navy Department two. Comparison with the preceding month of March, 1941, and the corresponding month last year follows:

#### April Orders Compared

	April 1941	March 1941	April 1940
Locomotives:			
Steam .....	1	56	50
Diesel-Electric .....	67	70	27
Electric .....	..	1	..
Total locos. ....	68	127	77
Freight cars .....	16,091	7,685	2,456
Passenger cars .....	33	120	2

The 16,091 freight cars ordered in April, comprising 2,224 from the railroads' own shops and 13,867 from car builders, represents the peak monthly volume in the current upswing in freight car buying which began in June of last year. It is the largest number placed in any April in the 1929-1941 cycle, the current base period of *Railway Age* equipment comparisons; and indeed, in only several months during this period has a larger number of cars been ordered. Purchases chiefly comprised box cars, 10,150 of the total ordered being of that type, and 3,669 hopper cars. Outstanding orders included 2,400 cars by the Illinois Central, 2,100 by the Louisville & Nashville, 2,000 by the New York Central, 1,700 cars and 50 cabooses by the Atchison, Topeka & Santa Fe, 1,600 cars and 70 cabooses by the Erie, 1,600 cars by the Atlantic Coast Line, 1,200 by the Norfolk & Western and 1,025 by the Chicago, Rock Island & Pacific. Other purchases are shown in detail in the accompanying table of orders.

Leading Diesel-electric purchases included 16 by the Chicago, Milwaukee, St. Paul & Pacific comprising two 4,000 hp. passenger units for service on the "Hiawatha," one 5,400 hp. main line freight locomotive, two units of 1,000 hp. for switching and light road service and one 600 hp. and ten 44-ton units for switching service; also, four 4,000 hp. passenger units by the Baltimore & Ohio and three 2,000 hp. units and five 30-ton Diesel-

## Domestic Equipment Orders Reported In Issues of The Railway Age In April 1941 (Including May 3)

### LOCOMOTIVES

Date	Name of Company	No.	Type	Builder
Apr. 12	Atchison, Topeka & Santa Fe..	1	Diesel-electric Frt.	Electro-Motive Corp.
Apr. 12	St. Louis-San Francisco .....	2	Diesel-electric Sw.	Davenport-Besler Corp.
Apr. 12	Picklands, Mather & Co. ....	1	0-8-0	Baldwin Locomotive Works
Apr. 12	Pennsylvania .....	1	Diesel-electric Sw.	Electro-Motive Corp.
Apr. 12	Dewey Portland Cement Co. ..	1	Diesel-mechanical Sw.	Davenport-Besler Corp.
Apr. 12	Day & Zimmerman, Inc. ....	2	Diesel-electric Sw.	Baldwin Locomotive Works
Apr. 12	Chicago, Rock Island & Pacific	2	Diesel-electric	Electro-Motive Corp.
		1	Diesel-electric	American Locomotive Co.
		5	Diesel-mechanical Sw.	Davenport-Besler Corp.
Apr. 12	Central of Georgia .....	2	Diesel-electric Sw.	Baldwin Locomotive Works
Apr. 12	Chicago & North Western .....	3	Diesel-electric Sw.	American Locomotive Co.
		3	Diesel-electric Sw.	Whitcomb Locomotive Co.
Apr. 12	Chicago, Milwaukee, St. Paul & Pacific .....	1	Diesel-electric Pass.	Electro-Motive Corp.
		1	Diesel-electric Frt.	Electro-Motive Corp.
		1	Diesel-electric Sw.	Electro-Motive Corp.
		1	Diesel-electric Sw.	American Locomotive Co.
		2	Diesel-electric Sw.	American Locomotive Co.
		2	Diesel-electric Sw.	Davenport-Besler Corp.
Apr. 19	Great Lakes Steel Co. ....	2	Diesel-electric Sw.	Electro-Motive Corp.
Apr. 19	Detroit, Toledo & Ironton .....	2	Diesel-electric Sw.	Electro-Motive Corp.
Apr. 19	Denver & Rio Grande Western	1	Diesel-electric Sw.	Electro-Motive Corp.
Apr. 19	Baltimore & Ohio .....	4	Diesel-electric Pass.	Electro-Motive Corp.
Apr. 19	Minnesota Transfer .....	3	Diesel-electric Sw.	American Locomotive Co.
Apr. 26	U. S. Navy Dept. ....	1	Diesel-electric Sw.	General Electric Co.
Apr. 26	Walsh Construction Co. ....	1	Diesel-electric Sw.	Whitcomb Locomotive Works
Apr. 26	Day & Zimmerman, Inc. ....	4	Diesel-electric Sw.	Whitcomb Locomotive Works
Apr. 26	Chicago, Milwaukee, St. Paul & Pacific .....	6	Diesel-electric Sw.	Whitcomb Locomotive Works
		2	Diesel-electric Sw.	General Electric Co.
Apr. 26	Houston Shipbuilding Corp. ....	3	Diesel-electric Sw.	Whitcomb Locomotive Works
May 3	Canton .....	1	Diesel-electric Sw.	Electro-Motive Corp.
May 3	Philadelphia, Bethlehem & New England .....	2	Diesel-electric Sw.	Electro-Motive Corp.
May 3	South Buffalo .....	3	Diesel-electric Sw.	American Locomotive Co.
May 3	U. S. Navy Dept. ....	1	Diesel-electric Sw.	Atlas Car & Mfg. Co.

### FREIGHT CARS

Apr. 5	Chicago, Rock Island & Pacific	25	Cov. Hopper	General American
Apr. 5	Bethlehem Steel Co. ....	12	Flat	Company Shops
Apr. 5	New York, Chicago & St. Louis	500	Box	American Car & Foundry
Apr. 5	Montour .....	300	Hopper	Pullman-Standard
Apr. 5	Aliquippa & Southern .....	50	LS-MT Gondola	Company Shops
Apr. 5	Lake Superior & Ishneming .....	100	Ore	Bethlehem Steel Co.
Apr. 12	Atchison, Topeka & Santa Fe..	1,000	Box	Pullman-Standard
		500	Auto	Pullman-Standard
		200	Gondola	General American
		50	Caboose	Company Shops
Apr. 12	New York Central .....	1,000	Box	Despatch Shops
		1,000	Gondola	Despatch Shops
Apr. 12	Illinois Central .....	1,000	Hopper	Pullman-Standard
		500	Box	General American
		200	Refrigerator	General American
		100	Cov. Hopper	General American
		500	Box	American Car & Foundry
Apr. 12	Bethlehem Steel Co. ....	3	Ingot	Company Shops
Apr. 12	General Electric Co. ....	1	Cov. Hopper	American Car & Foundry
Apr. 12	Southern Pacific .....	50	HS Gondola	American Car & Foundry
Apr. 12	Wheeling & Lake Erie .....	500	Hopper	American Car & Foundry
Apr. 12	Nashville, Chattanooga & St. Louis .....	200	Hopper	Pullman-Standard
Apr. 12	Central of Georgia .....	100	Box	Pullman-Standard
		100	Auto	Pullman-Standard
Apr. 19	Erie .....	800	Box	Pullman-Standard
		100	Furniture	American Car & Foundry
		100	Auto-box	American Car & Foundry
		50	Cov. Hopper	American Car & Foundry
		250	Hopper	General American
		250	DE-MT Gondola	Greenville Steel Car
		50	Flat	Greenville Steel Car
Apr. 19	U. S. Navy Dept. ....	6	Flat	Greenville Steel Car
		23	Gondola	Haffner-Thrall
Apr. 19	Baltimore & Ohio .....	100	Flat	Bethlehem Steel Co.
Apr. 19	Illinois Central .....	500	Hopper	American Car & Foundry
Apr. 26	Louisville & Nashville .....	500	Box	American Car & Foundry
		500	Hopper	American Car & Foundry
		600	Box	Pullman-Standard
Apr. 26	Erie .....	70	Caboose	Pullman-Standard
Apr. 26	Ann Arbor .....	25	Hopper	Company Shops
May 3	Utah Copper Company .....	75	Ore	Company Shops
May 3	Norfolk & Western .....	1,000	Box	Pressed Steel Car
		200	Box	Ralston Steel Car
		2	Air-dump	Greenville Steel Car
May 3	Republic Steel Corp. ....	5	Air-dump	Pressed Steel Car
May 3	Tennessee Coal, Iron & R. R. ....	6	Air-dump	Pressed Steel Car
May 3	Inland Mine & Stone Co. ....	30	Air-dump	Pressed Steel Car
May 3	Oliver Iron Mining Co. ....	50	Box	Pressed Steel Car
May 3	Sanderson & Porter Co. ....	25	Cov. Hopper	General American
May 3	Pere Marquette .....	2	Flat	American Car & Foundry
May 3	American Locomotive Co. ....	18	Cov. Hopper	American Car & Foundry
May 3	New York, Chicago & St. Louis	6	Well	American Car & Foundry
May 3	American Gas & Electric Co. ....	14	Transformer	Despatch Shops
May 3	New York Central .....	15	Flat	American Car & Foundry
May 3	U. S. Navy Dept. ....	100	Caboose	Mt. Vernon
May 3	Union Pacific .....	1,000	Box	Pressed Steel
May 3	Chicago, Rock Island & Pacific	800	Box	American Car & Foundry
May 3	Atlantic Coast Line .....	800	Box	Pullman-Standard
May 3	Baltimore & Ohio .....	27	Gondola	Bethlehem Steel Co.

### PASSENGER-TRAIN CARS

Apr. 12	Atchison, Topeka & Santa Fe..	2	Diner	Edward G. Budd Mfg. Co.
		1	Lunchcounter-diner	Edward G. Budd Mfg. Co.
		5	Mail-baggage	Edward G. Budd Mfg. Co.
		14	Mail-storage	Edward G. Budd Mfg. Co.
Apr. 26	Illinois Central .....	2	Diner	Pullman-Standard
May 3	Chicago, Rock Island & Pacific	7	Chair	Edward G. Budd Mfg. Co.
		2	Diner	Edward G. Budd Mfg. Co.



mechanical switchers by the Chicago, Rock Island & Pacific. During the month of April the Atchison, Topeka & Santa Fe ordered 22 passenger-train cars of various types, the Chicago, Rock Island & Pacific 7 chair cars and two diners and the Illinois Central two diners.

#### Locomotive Orders Revised

In the *Railway Age* of April 26, page 745, were reported orders for a number of Diesel-locomotives which were placed during the first three months of 1941 but not reported by the *Railway Age* due to the unavailability of the data at the time. Statistics of locomotive purchases have been adjusted to include these orders and revised totals of the number of units ordered in these months are shown hereunder:

1941	Locomotives			
	Steam	D. E. etc.	Elec.	Total
January .....	24	60	5	89
February .....	44	86	5	135
March .....	56	70	1	127
April .....	1	67	..	68

#### Equipment Orders—First Four Months

The volume of domestic equipment orders placed so far this year continues to mount to ever more impressive proportions. During the first four months equipment orders as reported in the *Railway Age* totaled 419 locomotives, 43,539 freight cars and 328 passenger-train cars, an increase of 238 locomotives, 36,005 freight cars and 302 passenger-train cars over the corresponding four months of 1940. Of the 419 locomotives ordered so far this year, 125 were steam, 83 Diesel-electric, gas-electric or other internal-combustion types and 11 electric, representing an increase of 52 steam, 175 Diesel-electric, etc., and 11 electric units over the corresponding period of last year. A comparison with the first four months of other years in the 1929-1941 cycle will be found in the appended table of orders placed during these periods. It will be noted that the 419 locomotives purchased represent the largest number placed during any corresponding four months in the 1929-1941 cycle and that the 43,539 freight cars purchased is exceeded only by the 52,944 cars placed in the first four months of 1929. The 328 passenger-train cars purchased is a larger number than placed during the whole of each of the last three years.

*Railway Age* totals as used in these comparisons include railway equipment ordered

by the railroads, industrial companies and United States government departments. A division of the 419 locomotives ordered during first four months of this year according to these classifications was as follows:

	First 4 Months Locomotive Orders			
	Steam	D. E. etc.	Elec.	Total
Railroads .....	120	190	11	321
Industries .....	5	35	..	40
U. S. Gov't. ....	..	58	..	58
	125	283	11	419

In order to appraise correctly the significance of the large volume of Diesel-electric, gas-electric and other internal-combustion type units ordered as shown above, it is necessary to examine the size of these units and the service to which they will be put. An analysis of the total number of Diesel-electric units ordered so far this year by horsepower is shown here-with:

Horsepower:	Diesel Locos.—First 4 Mos., 1941			
	R.R.s	Indus. tries	U.S. Gov't.	Total
5,400 .....	6	..	..	6
4,000 .....	8	..	..	8
2,000 .....	14	..	..	14
1,000 .....	64	1	..	65
600 or 660 .....	48	4	..	52
Less than 600 .....	50	30	58	138
Total .....	190	35	58	283

Of the 43,539 freight cars purchased during the first four months this year, 13,626 were placed with the railroads' own shops and 29,913 with car builders. Box cars accounted for more than half the total bought. A division by the various classes of cars ordered was as follows:

23,398 box	
9,334 hopper	
7,345 gondola	
1,385 refrigerator	
1,008 flat	
300 stock	
585 caboose	
184 miscellaneous	

#### Freight Car Orders in Last 12 Mos.

The past 12 months has witnessed the greatest upswing in freight car purchasing since 1929. In the 12 months ended April 30, 1941, a total of 100,876 freight cars have been ordered for domestic service, an increase of 44,580 cars over the corresponding 12 months period ending April 30, 1940. Not since 1929 have large monthly volumes of freight cars been so consistently booked and only during the months of April-June, 1936, and November, 1936-

April, 1937, is a comparable volume of equipment orders to be found.

#### More Cars to be Built

The railroads, as noted elsewhere in these pages, are giving earnest attention to their future car requirements. With 29,913 new cars ordered from car builders during the first four months of this year, and an estimated backlog of orders carried over from last year of about 30,000 cars, under present rates of operation the car builders can likely book orders for only about 7,000 more cars for delivery prior to the heavy October loadings. (Orders placed during the first week of May, reported elsewhere in this column, plus outstanding inquiries, exceed this remaining capacity.) This would indicate a probable total 1941 output by car builders of about 85,000-100,000 cars which would be in addition, of course, to the number supplied by the railroads' own shops. This estimate of 1941 output will be subject to upward revision as the current rate of operations of car builders is increased or additional work shifts added, which latter is reported as likely.

#### FREIGHT CARS

##### Atlantic Coast Line Buys 2,900 Cars

The Atlantic Coast Line has completed the placing of orders for a total of 2,900 freight cars, the inquiry for which was reported in the *Railway Age* of April 26. Orders for 1,600 box cars were reported in the *Railway Age* of May 3 and are included in the summary of April orders reported elsewhere in this column. The complete order comprises the following:

800 50-ton box cars, American Car & Foundry Co.
800 50-ton box cars, Pullman-Standard Car Manufacturing Company
700 50-ton auto cars, American Car & Foundry Co.
300 50-ton furniture cars, Mt. Vernon Car Manufacturing Company
200 50-ton high-side gondola cars, Bethlehem Steel Company
100 70-ton covered hopper cars, Bethlehem Steel Company

THE DETROIT, TOLEDO & IRONTON is inquiring for 50 covered hopper cars.

THE NEW YORK CENTRAL is reported to have ordered 10 well cars from Despatch Shops, Inc.

THE LEHIGH VALLEY is expected to enter the market for a total of about 1,010 freight cars, including box, hopper and gondola cars.

THE UNITED STATES GOVERNMENT has ordered 50 6,000-gal. tank cars of 30 tons' capacity and 50 flat cars of 30 tons' capacity from the American Car & Foundry Co.

THE WISCONSIN CENTRAL has ordered 150 50-ton 50-ft. box cars from the Pullman-Standard Car Manufacturing Company.

THE MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE has ordered 50 50-ton 50-ft. and 200 50-ton 40½-ft. box cars from the Pullman-Standard Car Manufacturing Company.

THE MISSOURI PACIFIC is inquiring for a total of 1,050 freight cars comprising 800 44-ft. 6-in. box cars of 50 tons' capac-

#### VOLUME OF DOMESTIC EQUIPMENT ORDERS REPORTED BY THE RAILWAY AGE

First Four Months—Years 1929-1941  
(See Note Below)

First Four Months	Locomotives*				Freight Cars	Passenger Cars
	Steam	Diesel-Elec.	Electric	Total		
1941 .....	125	283	11	419	43,539	328
1940 .....	73	108	..	181	7,534	26
1939 .....	65	77	2	144	5,679	110
1938 .....	18	44	3	65	1,065	112
1937 .....	126	46	24	196	37,813	458
1936 .....	69	18	2	89	13,717	104
1935 .....	9	15	4	28	1,805	59
1934 .....	24	5	16	45	15,275	271
1933 .....	1	6	..	7	13	4
1932 .....	..	1	..	1	341	30
1931 .....	21	8	11	40	5,070	1
1930 .....	243	7	7	257	26,232	362
1929 .....	325	4	31	360	52,944	563

\* Locomotive orders include purchases by railroads, industrial companies and U. S. Government departments.

NOTE: Orders for years 1929-1940 based on annual statistical survey; orders for 1941 are as developed by news service.

ity, 200 50-ft. 6-in. auto cars of 50 tons' capacity and 50 covered cement cars of 70 tons' capacity.

THE SOUTH AFRICAN RAILWAYS & HARBOURS is reported to have placed an order for 1,000 high side gondola cars with the Canadian Car & Foundry Co. The inquiry for this equipment was reported in the *Railway Age* of January 11.

THE CHICAGO & NORTH WESTERN has placed orders for 1,000 steel-sheathed wood-lined box cars of 50 tons' capacity, allocating 500 to the American Car & Foundry Co. and 500 to the Pullman-Standard Car Manufacturing Company.

THE KANSAS CITY SOUTHERN has ordered 50 50-ton 50½-ft. automobile cars from the Pullman-Standard Car Manufacturing Company. It has also ordered 200 50-ton 50-ft. box and 75 70-ton hopper cars from this company for the Louisiana & Arkansas. Inquiry for this equipment was reported in the *Railway Age* of April 5.

### LOCOMOTIVES

THE WESTERN PACIFIC will ask the district court for authority to purchase three 5,400 hp. Diesel-electric locomotives.

THE UNITED STATES NAVY DEPARTMENT, Bureau of Supplies & Accounts, has asked for bids on two 50-ton Diesel-electric locomotives, schedule 6477.

THE ALABAMA, TENNESSEE & NORTHERN has been authorized by the district court to purchase a 300-hp. Diesel-electric locomotive. It has also been authorized to purchase two used locomotives from the Gulf, Mobile & Ohio.

THE READING has placed orders for six Diesel-electric locomotives allocating two 1,000-hp. units and two 600-hp. units to the Electro Motive Corporation and two 600-hp. units to the American Locomotive Company. Authorization by the company's board of directors for the purchase of 10 Diesel-electric locomotives was reported in the *Railway Age* of March 29. The Baldwin Locomotive Company is expected to receive the order for the remaining four 600-hp. units.

### PASSENGER CARS

THE SOUTHERN PACIFIC is inquiring for 25 baggage cars.

### IRON AND STEEL

THE MISSOURI PACIFIC has been authorized by the district court to purchase 37,600 tons of rails.

### MOTOR VEHICLES

THE SAN DIEGO ELECTRIC RAILWAY has ordered 11 motor coaches from the a. c. f. Motors Company.

THE CHICAGO, NORTH SHORE & MILWAUKEE has ordered three 31-passenger street car type motor coaches from the a. c. f. Motors Company.

THE SOUTHEASTERN GREYHOUND LINES has ordered nine 33-passenger parlor car type motor coaches from the a. c. f. Motors Company.

## Supply Trade

**Wilfred Sykes**, who has been elected president of the **Inland Steel Company**, Chicago, as reported in the *Railway Age* of May 3, was born in New Zealand and started his career in Melbourne, Australia. In 1909 he served as a steel mill engineer for the Westinghouse Electric and Manufacturing Company and from 1920 to 1922 was employed as executive engineer by the Steel and Tube Company of America at Chicago. His association with Inland began in 1923 when he was employed to take charge of construction and engineering work. From 1927 to 1930 he served as assistant general superintendent of the Indiana Harbor Works and since 1930 he has



Wilfred Sykes

been assistant to the president. He is also chairman of the Milcor Steel Company and the Wilson & Bennett Manufacturing Company, two of Inland's subsidiary organizations.

**Philip D. Block**, who retires from the presidency to become chairman of the executive committee, was one of the original founders of the company in 1893. Since that time he has been a dominant force in developing the concern from a small re-rolling mill into one of the major steel



Philip D. Block

companies in the country and the largest independent producer in the Chicago area. Mr. Block served as a vice-president of the

company prior to 1919 when he became president.

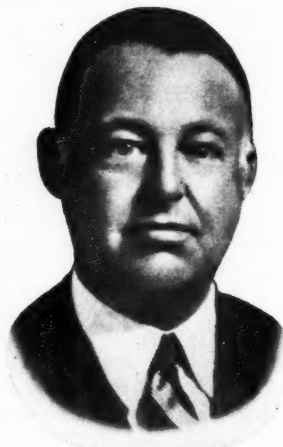
**James H. Walsh**, who has been elected vice-president was assistant general super-



James H. Walsh

intendent of the Indiana Harbor Works from 1922 to 1927 and general superintendent from 1927 to 1930. In the latter year he was promoted to works manager.

**John H. Collier**, vice-president of the **Crane Company**, Chicago, has been elected president to succeed **Charles B. Nolte**, deceased. Mr. Collier was born in 1884 and was educated at Purdue University. He entered the employ of the Crane Company in 1903 as a core makers helper and



John H. Collier

after holding various positions with the company was made general manager of the Bridgeport, Conn., plant in 1917. In 1929 he was sent to Paris as president of the company's French subsidiary and for the next four years served in that capacity and as chairman of the company's English subsidiary. In 1933 he returned to the United States and was elected vice-president in charge of manufacturing.

**John H. McCartney**, formerly New York representative, has been appointed manager of sales of the **Brake Equipment & Supply Co.** of Chicago. He will make his headquarters at the company's general office in Chicago.

**John A. Dillon** has been elected vice-president of the **O. C. Duryea Corpora-**



tion with headquarters at the company's general offices in New York. Mr. Dillon was formerly vice-president in charge of Eastern sales of the Pittsburgh Screw & Bolt Corporation.

The O. C. Duryea Corporation has moved its general office in New York from 30 E. 42nd St., to 30 Rockefeller Plaza.

Joseph F. Clary has been appointed head of the railway sales contact department of the Edward G. Budd Manufacturing Company, succeeding the late William T. Bennison, whose obituary was reported in the *Railway Age* of March 22.



Joseph F. Clary

Mr. Clary joined the Budd Company in 1933, and as project engineer in the rail-car division has worked in the design or engineering of all the stainless steel streamliners built by the company. He is a graduate of the Massachusetts Institute of Technology, 1929, and was previously associated with the Firestone Tire & Rubber Co. His headquarters will be at the Budd, Philadelphia, Pa., plant.

## OBITUARY

Alex T. Anderson, district manager, midwestern territory of the Duff-Norton Manufacturing Company, died April 29.

Fay E. Possen, formerly purchasing agent for the Vapor Car Heating Company, died of a heart attack April 7 at Los Altos, Cal. He was 57 years old.

O. C. Duryea, president of the O. C. Duryea Corporation of New York, whose death on April 27 was reported in the *Railway Age* of May 3, was born in Wyoming, Ill., April 25, 1880. He began his business career in the employ of his brothers manufacturing early automobiles. Before he was 21, however, he had received a number of patents on his own inventions. These were followed by many others. One of the most notable of his inventions was the Duryea railway cushion underframe for which he was awarded the George R. Henderson gold medal by the Franklin Institute of Philadelphia in 1933. This device is now the principal business of the O. C. Duryea Corporation. Mr. Duryea was a member of the Union League Club of Chicago.

## Construction

DENVER & RIO GRANDE WESTERN.—A contract amounting to about \$20,000 has been awarded the Utah Construction Company, for excavating and loading 75,000 to 80,000 cu. yd. of smelter slag for ballast at Murray, Utah and Leadville, Colo. The slag will be used to reballast 43.86 miles of track at a cost of approximately \$124,500.

DENVER & RIO GRANDE WESTERN.—A line change 3,352 ft. long will be completed with company forces at cost of approximately \$20,170.

DENVER & RIO GRANDE WESTERN.—This road will spend approximately \$202,190 this year on a system bridge and culvert repair and improvement program and approximately \$300,200 on various improvements at an important terminal, including the construction of a new classification yard with five tracks, rearrangement of other tracks, the replacement of water storage facilities, the enlargement of round-house facilities and the construction of a commissary and other buildings.

NEW YORK, NEW HAVEN & HARTFORD.—A contract has been awarded the Ross and White Company, Chicago, for the construction of a locomotive coaling station and a sanding station for both Diesel and steam locomotives at Dover street, Boston, Mass.

PENNSYLVANIA.—This company has awarded a contract for construction work on the Ninth street overhead bridge at Washington, D. C., to the James McGraw Company of Philadelphia, Pa.

PENNSYLVANIA.—The Ross and White Company, Chicago, has been awarded a contract for a Red Devil automatic locomotive coaler, which will be installed at Dayton, Ohio.

READING.—The Pennsylvania Public Utility Commission has approved the elimination of a crossing at grade where state highway Route No. 149 crosses the four main tracks of the Reading in Avon, Lebanon county. The plans call for the construction of a portion of a new highway and of a continuous plate girder bridge 290 ft. in length to carry the new highway across and above the grade of the tracks at a point about 620 ft. west of the existing crossing. The bridge, as proposed, consists of two spans each 142 ft. 9½ in. in length. Cost of the improvement is estimated at \$403,814, exclusive of property damages. The Department of Highways intends to undertake construction of the proposed improvement as a Federal Aid Grade Crossing Elimination Project.

UNITED STATES ENGINEERS OFFICE, Seattle, Wash.—Bids will be opened on a date not yet announced for furnishing all labor and materials and performing all work in connection with the construction of 11.2 miles of roadbed, including two tunnels, for the passage canal connection of the Alaska Railroad located about midway between Seward and Anchorage, Alaska—inv. 233.

## Financial

ATLANTA, BIRMINGHAM & COAST.—*Annual Report*.—The 1940 annual report of this road shows net deficit, after interest and other charges, of \$215,277, an increase of \$112,784 over the 1939 deficit. Selected items from the income statement follow:

	1940	Increase or Decrease Compared with 1939
RAILWAY OPERATING REVENUES	\$3,455,361	+\$9,620
Maintenance of way	567,522	+50,124
Maintenance of equipment	643,746	+16,834
Transportation	1,471,218	+76,529
TOTAL OPERATING EXPENSES	3,149,609	+124,586
Operating ratio	91.15	+3.36
NET REVENUE FROM OPERATIONS	305,752	-114,966
Railway tax accruals	276,312	+2,325
Railway operating income	29,441	-117,291
Equipment rents	246,157	-16,893
—Net Dr.		
Joint facility rents	9,242	+49
—Net Dr.		
NET RAILWAY OPERATING DEFICIT	225,958	+100,447
OTHER INCOME	35,466	-2,760
GROSS INCOME*	190,492	-103,208
Interest on funded debt	185	-306
TOTAL FIXED CHARGES	14,655	+2,370
NET DEFICIT	\$215,277	+\$112,784

\* Deficit.

ATLANTIC COAST LINE.—*Annual Report*.—The 1940 annual report of this road shows net income, after interest and other charges, of \$1,823,537, an increase of \$1,019,463 as compared with net income in 1939. Selected items from the income statement follow:

	1940	Increase or Decrease Compared with 1939
RAILWAY OPERATING REVENUES	\$50,087,984	+\$2,988,696
Maintenance of way	5,162,193	+207,051
Maintenance of equipment	10,118,662	+1,014,415
Transportation	20,018,750	+1,346,888
TOTAL OPERATING EXPENSES	39,567,509	+2,895,728
Operating ratio	79	+1.14
NET REVENUE FROM OPERATIONS	10,520,475	+92,968
Railway tax accruals	4,550,000	+160,000
Railway operating income	5,970,475	-67,032
Equipment rents	2,254,146	-80,818
—Net Dr.		
Joint facility rents	40,904	-38,424
—Net Cr.		
NET RAILWAY OPERATING INCOME	3,757,234	-24,638
Other income	5,215,041	+863,818
GROSS INCOME	8,972,275	+839,180
MISC. DEDUCTIONS FROM INCOME	939,792	20,191
Interest and rentals	6,208,946	160,092
NET INCOME	\$1,823,537	\$1,019,463

BALTIMORE & OHIO.—*Equipment Trust Certificates*.—This road is asking for bids on or before May 13 on a proposed issue of \$5,880,000 equipment trust certificates,

to be designated Series L. The issue is to be dated June 1, 1940, and will mature in ten equal annual installments to and including 1951.

**BINGHAM & GARFIELD.—Deficit Status.**—Division 4 of the Interstate Commerce Commission has found that this company earned a net railway operating income in excess of 5¾ per cent per year on the value of its property, and is not entitled to reimbursement under the provisions of section 204 of the Transportation Act of 1920, as amended January 7, 1941, for any losses suffered during the period of federal control. Division 4 found that the period of private operation under federal control was 22.7 months, which would entitle the company to earn income at the rate of 10.87 per cent for the period, whereas it earned at the rate of 15.07 per cent. An order was entered dismissing the carrier's claim.

**CENTRAL OF NEW JERSEY.—L. C. & N. Rent.**—Federal Judge Guy Fake of the United States district court of Newark, N. J., has directed trustees of this road to pay approximately \$370,000 in back rent due to the Lehigh Coal & Navigation Co. for lease of the Lehigh & Susquehanna.

**CHICAGO, BURLINGTON & QUINCY.—Annual Report.**—The 1940 annual report of this road shows net income, after interest and other charges, of \$4,392,864, an increase of \$731,525 as compared with net income in 1939. Selected items from the income statement follow:

	1940	Increase or Decrease Compared with 1939
RAILWAY OPERATING REVENUES	\$97,631,242	+\$1,499,448
Maintenance of way	13,353,279	+508,514
Maintenance of equipment	16,783,688	-598,305
Transportation	35,277,423	+1,020,427
TOTAL OPERATING EXPENSES	71,853,873	+967,977
NET REVENUE FROM OPERATIONS	25,777,369	+531,471
Railway tax accruals	8,697,632	+80,830
Railway operating income	17,079,737	+450,641
Equipment rents	1,952,935	-274,336
—Net Dr.	2,044,024	-87,349
Joint facility rents		
—Net Dr.		
NET RAILWAY OPERATING INCOME	13,082,778	+812,326
Other income	1,070,532	-64,433
TOTAL INCOME	14,153,309	+747,892
Rent for leased roads	81,143	-4,085
Interest on funded debt	9,320,918	-55,853
TOTAL FIXED CHARGES	9,658,152	+12,687
NET INCOME	\$4,392,864	+\$731,525

**CHICAGO, BURLINGTON & QUINCY.—Abandonment.**—This company has asked the Interstate Commerce Commission for authority to abandon a line extending from Baiotto Mine Spur, Mo., to South Gifford, 7.1 miles.

**CHESAPEAKE & OHIO.—Equipment Trust Certificates.**—This road has awarded a \$5,100,000 issue of equipment trust certificates to Salomon Bros. & Hutzler, Dick & Merle-Smith and Stroud & Co. on a bid

of 100.099 for 1½ per cent obligations. The certificates, due serially in from one to ten years, were immediately re-offered to the public on April 30 at prices to yield from 0.30 to 1.95 per cent.

**CHICAGO, ROCK ISLAND & PACIFIC.—Two New Directors.**—S. R. Arias, a member of the financial firm of Newman Brothers & Worms, New York, and Ward Vanderpool, assistant secretary and treasurer of the Rock Island, have been elected directors to succeed the late A. C. Rearick and F. E. Walsh, respectively.

**CHICAGO, ROCK ISLAND & PACIFIC.—Annual Report.**—The 1940 annual report of this company shows net deficit, after interest and other charges, of \$5,604,165, a decrease of \$2,733,383 as compared with net deficit in 1939. Selected items from the income account follow:

	1940	Increase or Decrease Compared with 1939
RAILWAY OPERATING REVENUES	\$80,701,923	+\$2,234,105
Maintenance of way	11,208,952	-1,019,060
Maintenance of equipment	14,582,286	+59,624
Transportation	29,935,633	+178,142
TOTAL OPERATING EXPENSES	62,391,445	-617,837
Operating ratio	77.31	-2.99
NET REVENUE FROM OPERATIONS	18,310,478	+2,851,942
Railway tax accruals	5,568,230	+60,797
Railway operating income	12,742,249	+2,791,145
Equipment rents—Dr.	3,584,871	+223,053
Joint facility rents—Dr.	1,023,900	-106,532
NET RAILWAY OPERATING INCOME	8,133,477	+2,674,624
Non-operating income	441,630	-98,698
TOTAL INCOME	8,575,107	+2,575,926
Rent for leased roads and equipment	233,949	-2,026
Total interest	13,787,995	-188,899
NET DEFICIT	\$5,604,165	-\$2,733,383

**VIRGINIA & TRUCKEE.—Abandonment.**—This company has asked the Interstate Commerce Commission for authority to abandon a line extending from Carson City, Nev., to Virginia City, 20 miles.

**DETROIT, TOLEDO & IRONTON.—Abandonment.**—This company would be authorized to abandon a branch line extending from Jeffersonville, Ohio, to Sedalia, seven miles. if Division 4 of the Interstate Commerce Commission adopts a proposed report of its Examiner A. G. Nye.

**ERIE.—Equipment Trust Certificates.**—This road has awarded a \$4,000,000 issue of equipment trust certificates to an underwriting group headed by Lazard Freres & Co. on a bid of 100.064 for 1½s. This represents an interest cost to the road of 1.86 per cent. The issue was immediately re-offered on April 30 to the public at prices to yield from 0.45 to 2.20 per cent. The certificates mature serially May 1, 1942, to 1951, inclusive.

**DENVER & RIO GRANDE WESTERN.—Reorganization.**—This company's reorganization proceedings have been reopened by the Interstate Commerce Commission for the

purpose of receiving evidence to bring the record of its operations down to date, and such other evidence and suggestions as will assist in a reconsideration of the final plan of reorganization under section 77 of the Bankruptcy Act which has been approved by the commission but which has been referred back to it by the United States District Court in Colorado.

The hearing will be held before Examiner R. T. Boyden on May 20 in Washington, D. C.

**GREAT NORTHERN.—Annual Report.**—The 1940 annual report for this company shows net income, after interest and other charges, of \$10,208,194, compared with a net income of \$8,686,425 in 1939. Selected items from the income statement follow:

	1940	Increase or Decrease Compared with 1939
Average mileage operated	8,068.72	-2.96
RAILWAY OPERATING REVENUES	\$101,743,146	+\$9,959,773
Maintenance of way and structures	13,230,789	+1,971,661
Maintenance of equipment	17,436,498	+2,005,083
Transportation	30,034,420	+1,532,667
TOTAL OPERATING EXPENSES	65,901,723	+5,439,053
NET REVENUE FROM OPERATIONS	35,841,423	+4,520,720
Railway tax accruals	12,273,206	+2,151,737
Railway operating income	23,568,217	+2,368,983
Equipment rents	1,361,148	+46,967
—Net Dr.	400,005	+99,547
Joint facility rents		
—Net Dr.		
NET RAILWAY OPERATING INCOME	21,807,064	+2,222,469
Total other income	3,218,139	-909,509
TOTAL INCOME	25,025,203	+1,312,960
Rent for leased roads and equipment	24,928	+1,389
Interest on funded debt	13,722,692	-309,903
—Fixed interest		
TOTAL FIXED CHARGES	14,212,128	-3,642
NET INCOME	\$10,208,194	+\$1,521,769

**GULF, MOBILE & OHIO.—Acquisition and Operation.**—This company has been authorized by Division 4 of the Interstate Commerce Commission to acquire and operate a line extending from Mobile, Ala., to Farnell, 2.5 miles. The line in question is a segment of the part of the Mobile & Ohio's Bay Shore branch, heretofore ordered by the commission to be abandoned. The acquisition of the line will permit the G. M. & O. to serve a large plant and lumber mill of the Southern Furniture Manufacturing Company which will be built near Farnell.

**LOUISVILLE & NASHVILLE.—Annual Report.**—The 1940 annual report of this road shows net income, after interest and other charges, of \$9,537,146, an increase of \$2,142,915 as compared with net income in 1939. Selected items from the income statement follow:

	1940	Increase or Decrease Compared with 1939
RAILWAY OPERATING REVENUES	\$98,001,627	+\$9,653,371



TOTAL OPERATING EXPENSES	72,057,365	+7,067,830
Operating ratio	73.5	-0.1
NET REVENUES FROM OPERATIONS	25,944,262	+2,585,541
Railway tax accruals	10,304,935	+2,169,235
Railway operating income	15,639,327	+416,306
Equipment rents	2,393,196	+856,928
—Net Cr.		
Joint facility rents	844,530	-66,099
—Net Dr.		
NET RAILWAY OPERATING INCOME	17,187,993	+1,339,333
Other income	1,661,455	+547,324
GROSS INCOME	18,849,448	+1,886,657
Rent for leased roads	349,197	+17,651
Interest on funded debt	8,820,582	-292,208
TOTAL FIXED CHARGES	9,203,198	-269,707
NET INCOME	\$9,537,146	+\$2,142,915

MINNEAPOLIS, NORTHFIELD & SOUTHERN.—*Abandonment.*—This company has asked the Interstate Commerce Commission for authority to abandon its so-called Ellison line, consisting of 1.7 miles in and near Northfield, Minn.

MINNEAPOLIS & ST. LOUIS.—*Adjournment of sale.*—Sale of the properties of this road heretofore set for April 25 has been adjourned to 10 a. m., May 29, at the division superintendent's office, Cedar Lake Yards, Minneapolis, Minn.

MINNEAPOLIS & ST. LOUIS.—*Annual Report.*—The 1940 annual report of this road shows net income, after interest and other charges, of \$1,375,132, an increase of \$393,570 as compared with net income in 1939. Selected items from the income statement follow:

	1940	Increase or Decrease Compared with 1939
Average mileage operated	1503.90	-14.31
RAILWAY OPERATING REVENUES	\$9,699,774	+\$484,637
Maintenance of way	1,460,464	+77,701
Maintenance of equipment	1,483,382	+7,473
Transportation	3,285,567	+53,107
TOTAL OPERATING EXPENSES	7,220,992	+126,340
Operating ratio	74.44	-2.55
NET REVENUE FROM OPERATIONS	2,478,782	+358,297
Railway tax accruals	573,532	+14,332
Railway operating income	1,905,250	+343,964
Hire of equipment	483,573	-6,413
—Net Dr.		
Joint facility rents	31,519	+6,805
—Net Dr.		
NET RAILWAY OPERATING INCOME	1,390,158	+343,573
Non-operating income	61,036	-8,887
GROSS INCOME	1,451,194	+334,685
Rent for leased roads and equipment	22,370	-95
Interest on funded debt	563	-26,221
TOTAL DEDUCTIONS FROM GROSS INCOME	76,062	-58,884
NET INCOME	\$1,375,132	+\$393,570

MINNEAPOLIS & ST. LOUIS.—*Sale.*—The sale of the properties of the Minneapolis & St. Louis, scheduled for April 25, 1941, has been postponed until May 29, 1941.

MONTOUR.—*Trackage Rights.*—This company has asked the Interstate Commerce Commission to approve an extension of a trackage agreement which was dated

October 1, 1913, permitting it to operate over the lines of the Pittsburgh & West Virginia from Salida, Pa., to Mifflin Junction, 2.9 miles.

MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE.—*Annual Report.*—The 1940 annual report of this company shows a balance of \$2,128,054, as compared with a balance of \$943,606 in 1939. Selected items from the income statement follow:

	1940	Increase or Decrease Compared with 1939
RAILWAY OPERATING REVENUES	\$17,137,578	+\$1,792,488
Maintenance of way	2,935,535	+310,233
Maintenance of equipment	2,682,768	+15,448
Transportation	6,709,801	+260,052
TOTAL OPERATING EXPENSES	13,359,436	+559,825
Operating ratio	77.95	-5.46
NET REVENUE FROM OPERATIONS	3,778,142	+1,232,663
Net equipment, joint facility rents and taxes—Dr.	1,741,864	+39,358
NET RAILWAY OPERATING INCOME	2,036,278	+1,193,305
Other income—Net	131,677	-18,321
TOTAL INCOME	2,167,955	+1,174,984
Rent for leased roads, interest on equipment obligations and miscellaneous accounts being paid by the trustees	39,901	-9,464
BALANCE	\$2,128,054	+\$1,184,448

In addition to the fixed charges being paid by the Trustees, interest was accrued on the books of the company on bonds, notes, advances, etc., amounting to \$6,556,853 in 1940, compared with \$6,575,991 in 1939.

NEW YORK, SUSQUEHANNA & WESTERN.—*Annual Report.*—The 1940 annual report for this company shows net deficit of \$146,921, after interest and other charges, compared with a net deficit of \$315,925 in 1939. Selected items from the income statement follow:

	1940	Increase or Decrease Compared with 1939
RAILWAY OPERATING REVENUES	\$3,198,702	+\$193,088
Maintenance of way and structures	271,462	+5,820
Maintenance of equipment	320,195	-5,194
Transportation	1,307,535	+106,521
TOTAL OPERATING EXPENSES	2,060,496	+61,979
NET REVENUE FROM OPERATIONS	1,138,206	+131,109
Railway tax accruals	348,916	-2,772
Railway operating income	789,291	+133,881
Net rents—Dr.	350,207	-40,867
NET RAILWAY OPERATING INCOME	439,084	+174,747
Total other income	70,860	-3,510
TOTAL INCOME	509,944	+171,238
Rent for leased roads and equipment	27,286	-859
TOTAL FIXED CHARGES	649,532	+1,240
NET DEFICIT	\$146,921	-\$169,003

NORFOLK SOUTHERN.—*Sale to New Company.*—Properties of the Norfolk Southern Railroad Company, in receivership since 1932, were sold for \$2,000,000 at Princess Anne county courthouse, Va., on April 30, to C. M. Shanks, reorganization manager for the new company. Sale was a fore-

closure action under an order entered by the federal district court at Norfolk.

NEW YORK, SUSQUEHANNA & WESTERN.—*Valuation Sought.*—Federal judge William Clark has instructed Trustee Walter Kidde of this road to request the Interstate Commerce Commission to bring the property valuation of the road down to date to serve as a basis for its plan of reorganization.

PITTSBURGH & LAKE ERIE.—*Annual Report.*—The 1940 annual report of this road shows net income, after interest and other charges, of \$5,077,281, an increase of \$1,487,032 as compared with net income in 1939. Selected items from the income account follow:

	1940	Increase or Decrease Compared with 1939
Average mileage operated	232.51	-0.45
RAILWAY OPERATING REVENUES	\$23,947,038	+\$4,696,044
TOTAL OPERATING EXPENSES	18,231,615	+2,459,292
Operating ratio	76.13	-5.80
NET REVENUE FROM OPERATIONS	5,715,423	+2,236,752
Railway tax accruals	3,084,989	+1,042,308
Railway operating income	2,630,434	+1,194,444
Equipment rents	2,918,385	+585,450
—Net Cr.		
Joint facility rents	42,707	+4,916
—Net Cr.		
NET RAILWAY OPERATING INCOME	5,591,525	+1,784,809
Other income	407,351	-102,335
TOTAL INCOME	5,998,576	+1,682,474
Rent for leased roads and equipment	40,560	+1,653
TOTAL FIXED CHARGES	42,823	+3,194
NET INCOME	\$5,077,281	+\$1,487,032

SEABOARD AIR LINE.—*Abandonment by the Raleigh & Charleston.*—The Raleigh & Charleston has been authorized by Division 4 of the Interstate Commerce Commission to abandon its entire line extending from Lake View, S. C., to South Marion, 19.9 miles. Commissioner Mahaffie said that he agreed with the decision of the majority except that he would limit the certificate to abandonment of operations in interstate and foreign commerce.

RICHMOND, FREDERICKSBURG & POTOMAC.—*Annual Report.*—The 1940 annual report for this company shows net income, after interest and other charges, of \$975,780, a decrease of \$113,557 as compared with 1939. Selected items from the income statement follow:

	1940	Increase or Decrease Compared with 1939
RAILWAY OPERATING REVENUES	\$9,678,351	+\$926,116
Maintenance of way and structures	1,101,332	+216,278
Maintenance of equipment	1,683,072	+55,960
Transportation	3,550,709	+311,059
TOTAL OPERATING EXPENSES	6,991,026	+616,749
NET REVENUE FROM OPERATIONS	2,687,325	+309,367
Railway tax accruals	852,644	+89,774
Railway operating income	1,834,681	+219,593

Hire of equipment		
—Dr.	614,384	+136,170
Joint facility rents		
—Dr.	144,309	+222,345
NET RAILWAY		
OPERATING INCOME	1,075,988	-138,922
Non-operating income	223,408	+5,457
GROSS INCOME	1,299,396	-133,466
Interest on funded debt*	310,525	-18,725
TOTAL DEDUCTIONS FROM GROSS INCOME	323,616	-19,908
NET INCOME	\$975,780	-\$113,557

\* Includes interest on 6% and 7% Guaranteed Stocks.

ST. LOUIS-SAN FRANCISCO.—*Annual Report.*—The 1940 annual report for this company shows net deficit of \$7,264,510, after interest and other charges, compared with a net deficit of \$8,805,922 in 1939. Selected items from the income statement follow:

	1940	Increase or Decrease Compared with 1939
Average mileage operated	5,095.20	-119.73
RAILWAY OPERATING REVENUES	\$48,180,971	+\$464,874
Maintenance of way and structures	6,633,228	-579,472
Maintenance of equipment	7,483,701	-590,535
Transportation	18,332,095	+410,062
TOTAL OPERATING EXPENSES	39,140,482	-882,590
NET REVENUE FROM OPERATIONS	9,040,489	+1,347,465
Railway tax accruals	3,919,063	+9,589
Hire of equipment		
—Net Dr.	385,187	-108,909
Joint facility rents		
—Net Cr.	227,322	+3,018
NET RAILWAY OPERATING INCOME	5,279,291	+1,443,767
Non-operating income	173,037	+13,853
GROSS INCOME	5,452,328	+1,457,619
Rentals	64,022	-2,686
TOTAL DEDUCTIONS FROM GROSS INCOME	90,720	-1,779
NET DEFICIT	\$7,264,510	-\$1,541,412

SOUTHERN PACIFIC.—*Abandonment by the Arizona Eastern.*—The Arizona Eastern and the Southern Pacific, respectively, have been authorized by Division 4 of the Interstate Commerce Commission to abandon a line and the operation thereof, extending from West Chandler, Ariz., to the end of the line, 0.9 mile.

TENNESSEE CENTRAL.—*Annual Report.*—The 1940 annual report for this company shows net income, after interest and other charges of \$72,425, as compared with a net income of \$85,126 in 1939. Selected items from the income statement follow:

	1940	Increase or Decrease Compared with 1939
RAILWAY OPERATING REVENUES	\$2,589,413	+\$127,263
Maintenance of way	440,632	+30,309
Maintenance of equipment	397,795	+19,241
Transportation	893,209	+41,782
TOTAL OPERATING EXPENSES	1,933,930	+96,870
Operating ratio	81.26	+0.10
NET REVENUE FROM OPERATIONS	655,483	+30,393
Railway tax accruals	170,240	+8,949

Railway operating income	485,243	+21,444
Equipment rents		
—Net Dr.	169,100	+10,085
Joint facility rents		
—Net Dr.	5,528	-415
Non-operating income	12,095	-19,593
GROSS INCOME	497,339	+1,851
Rent for leased roads and equipment	34,931	+1,759
Interest on funded debt	208,003	+2,191
TOTAL DEDUCTIONS FROM GROSS INCOME	424,914	+14,553
NET INCOME	\$72,425	-\$12,701

TOLEDO, PEORIA & WESTERN.—*Annual Report.*—The annual report of this road shows net income, after interest and other charges, of \$377,367, a decrease of \$6,029 compared with net income in 1939. Selected items from the income account follow:

	1940	Increase or Decrease Compared with 1939
RAILWAY OPERATING REVENUES	\$2,273,432	+\$91,809
Maintenance of way	432,371	-27,446
Maintenance of equipment	180,182	+17,699
Transportation	538,351	+7,233
TOTAL OPERATING EXPENSES	1,516,631	+26,044
NET REVENUE FROM OPERATIONS	856,800	+65,764
Railway tax accruals	241,441	+78,696
Equipment rents		
—Net Dr.	214,508	+10,587
Joint facility rents		
—Net Cr.	19,943	+18,614
NET RAILWAY OPERATING INCOME	420,795	-22,189
Other income	28,182	+13,182
GROSS INCOME	448,977	-9,007
Interest on funded debt	62,858	-232
TOTAL DEDUCTIONS FROM GROSS INCOME	71,610	-2,978
NET INCOME	\$377,367	-\$6,029

WABASH.—*Abandonment.*—This company has asked the Interstate Commerce Commission to reconsider its application for authority to abandon its Glasgow branch extending from Salisbury, Mo., to Glasgow, 15.4 miles. Division 4 on March 18, 1940, denied the company authority to abandon the branch but without prejudice to its right to renew its application after a period of a year had elapsed. Details of this decision were given in the *Railway Age* of March 30, 1940, page 613. The present petition points out that the revenues from the branch have continued to fall off and are not sufficient to justify its continued operation.

### Dividends Declared

Cleveland & Pittsburgh.—Guaranteed, 87½¢, quarterly; Special Guaranteed, 50¢, quarterly, both payable June 2 to holders of record May 10.

Norfolk & Western.—\$2.50, quarterly, payable June 19 to holders of record May 31.

Reading Company.—1st Preferred, 50¢, quarterly, payable June 12 to holders of record May 22.

### Average Prices of Stocks and Bonds

	May 6	Last week	Last year
Average price of 20 representative railway stocks..	29.82	29.51	31.88
Average price of 20 representative railway bonds..	66.03	66.03	59.28

## Railway Officers

### EXECUTIVE

Richard H. Bates, supervisor of train schedules for the Union Pacific at Omaha, Neb., has been promoted to assistant to the vice-president in charge of operations, with the same headquarters. Mr. Bates was



Richard H. Bates

born at Battle Creek, Neb., in 1890, and entered railway service in 1905 as a station helper on the Union Pacific at Madison, Neb. Between 1915 and 1925 he served as a telegraph operator and train dispatcher on the Nebraska division and in 1926 he was promoted to trainmaster on that division. Mr. Bates was later transferred to the Wyoming division and in the latter part of 1928 he was advanced to assistant superintendent, with headquarters at Cheyenne, Wyo. In 1930 he was transferred to Green River, Wyo., and the following year he was appointed supervisor of train schedules at Omaha, which position he held until his recent promotion.

### FINANCIAL, LEGAL AND ACCOUNTING

W. W. Kolhoff has been appointed auditor of the Toledo Terminal, succeeding D. C. Follas, deceased.

Clayton H. Maurice, general auditor of the Rutland, has been appointed comptroller, with headquarters as before at Rutland, Vt., succeeding L. V. Porter, resigned. The position of general auditor has been abolished.

Thomas E. Conlon, assistant general freight claim agent of the Baltimore & Ohio, has been appointed tax agent, with headquarters as before at Baltimore, Md., succeeding Hugh McNeil, Jr., who has resigned on account of ill health, after almost 50 years of service.

Mr. Conlon was born in Toledo, Ohio, on June 27, 1883, and was graduated from De La Salle Academy, Toledo, and the University of Baltimore Law School, becoming a member of the bar in 1928. Mr. Conlon entered railroad service with the



Baltimore & Ohio at Toledo in December, 1900, as stenographer in the division freight agent's office. In November, 1903, he was transferred to the general freight office in Pittsburgh, Pa., and became stenographer and chief clerk there in February, 1904.



Thomas E. Conlon

He was promoted to secretary to division freight agent in May, 1904, and to secretary to general freight agent in May, 1906. He was appointed traveling freight agent at Connellsville, Pa., in 1914 and in 1918 went to Baltimore as supervisor of freight suits for the entire system, his work consisting of preparation of law suits growing out of loss and damage to freight. On January 1, 1940, he was promoted to assistant general freight claim agent, the position he held until his recent appointment.

Mr. McNeil was born on October 26, 1874, and entered railroad service in September, 1891, as messenger in the law department of the Baltimore & Ohio at Baltimore, where he served successively as file clerk in the law department, secretary to tax agent, assistant to tax agent, assistant tax agent, first assistant tax agent and tax agent, being appointed to the latter position in February, 1929.

#### OPERATING

Edward G. Fischer has been appointed assistant trainmaster, Grand Central terminal, New York, effective May 1.

Robert J. Stone has been appointed trainmaster on the Southern at Tallapoosa, Ala.

H. J. Miller, superintendent of the Sand Springs Railway, has been promoted to general manager, with headquarters as before at Sand Springs, Okla., succeeding H. T. Morrison, who retired on May 1.

#### TRAFFIC

Charles E. Black, superintendent milk service of the New York Central lines Buffalo and East, with headquarters at New York, has been appointed also assistant to freight traffic manager, with the same headquarters.

J. C. Vandegriff has been appointed general eastern agent of the Atlanta & West Point, the Western Railway of Alabama and the Georgia railroad, with head-

quarters at New York, succeeding M. M. Ansley, who has retired after 41 years of service. G. E. Parker has been appointed general agent at Montgomery, Ala., succeeding F. G. Bennett, who has retired.

C. N. Bissell, assistant to general freight agent on the Central of New Jersey, has been promoted to assistant general freight agent, with headquarters as before at New York, succeeding J. F. Hourigan, who has been appointed to succeed the late A. L. Hocking, with no change in title. J. Laurie has been appointed assistant to general freight agent, to succeed Mr. Bissell.

M. B. Hutchins, whose promotion to assistant to the chief traffic officer of the Chicago & North Western, with headquarters at Chicago, was reported in the *Railway Age* of April 26, was born at Polk, Iowa, on January 31, 1893, and entered railway service on May 1, 1910, as a telegraph operator near Des Moines, Iowa. He was later advanced successively to station agent, ticket clerk, assistant city ticket agent, ticket agent, chief clerk to the general agent and chief clerk to the assistant freight traffic manager. He was then appointed traveling freight agent at St. Louis, Mo., and in March, 1928, he was promoted to general agent at Cincinnati, Ohio. Mr. Hutchins was advanced to assistant to the vice-president in charge of traffic, with headquarters at Chicago, in July, 1929, and on January 1, 1938, he was appointed assistant general freight agent-traffic, with the same headquarters, the position he held until his recent promotion, which was effective April 1.

George C. Stohlman, whose promotion to executive general agent for the Missouri Pacific Lines in Louisiana, with headquarters at New Orleans, La., was reported in the *Railway Age* of May 3, was born at Pacific, Mo., on March 4, 1892, and entered railway service on October 1, 1907, as an office boy in the engineering department of the Missouri Pacific at St. Louis, Mo.



George C. Stohlman

He later served in various stenographic and clerical positions at Little Rock, Ark., and Van Buren, Ark. On July 10, 1911, Mr. Stohlman went with the Atchison, Topeka & Santa Fe as a stenographer-clerk in the trainmaster's office at Needles, Cal., but returned to the Missouri Pacific a month

later as stenographer for the general manager at St. Louis. On March 1, 1913, he was promoted to secretary to the superintendent of transportation. Three years later he was appointed secretary to the passenger traffic manager and on March 19, 1918, he left railroad service to become secretary to the president of the National Bank of Commerce at St. Louis. Several months later he returned to the Missouri Pacific as secretary to the general manager and on September 11, 1921, he was appointed chief clerk to the passenger traffic manager. On June 1, 1925, he was appointed chief clerk to the president and on October 1, 1928, he was appointed secretary to the president. Mr. Stohlman was appointed general freight agent at St. Louis on January 1, 1933, and on March 1, 1936, he was appointed general freight and passenger agent at Little Rock, the position he held until his recent promotion.

#### ENGINEERING AND SIGNALING

Benjamin Elkind has been appointed office engineer of the Erie, a newly created position, with headquarters at Cleveland, Ohio.

J. G. Gilley, assistant division engineer of the Ashland division of the Chesapeake & Ohio, with headquarters at Ashland, Ky., has been promoted to division engineer of the Richmond division at Richmond, Va., succeeding J. W. Knapp, Jr., whose appointment as trainmaster of the Peninsula and Rivanna sub-divisions was reported in the *Railway Age* of May 3.

#### PURCHASES AND STORES

O. A. Schultz, Pacific Coast lumber agent of the Chicago, Burlington & Quincy, has been appointed assistant purchasing agent, a newly created position with headquarters as before at Seattle, Wash. The position of Pacific Coast lumber agent has been abolished.

#### OBITUARY

W. C. Kegler, engineer of track and roadway of the Cleveland, Cincinnati, Chicago & St. Louis, with headquarters at Cincinnati, Ohio, died on May 6.

Burton P. Flory, former superintendent of motive power of the New York, Ontario & Western at Middletown, N. Y., whose death on April 29 was reported in the *Railway Age* of May 3, was born on November 9, 1873, at Susquehanna, Pa., and received his mechanical engineering degree from Cornell University in 1895. He entered railroad service in 1899 as inspector on the Lehigh Valley, subsequently serving with that road as chief draftsman and mechanical engineer. In 1904 he went with the Central of New Jersey as mechanical engineer and in 1909 became superintendent of motive power of the New York, Ontario & Western, the position he held until his retirement on April 1, 1937. Mr. Flory was a past president of the New York Railroad Club and a member of the American Society of Mechanical Engineers and the American Society for Testing Materials.

Table of Revenues and Expenses  
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## REVENUES AND EXPENSES OF RAILWAYS

MONTH OF MARCH AND THREE MONTHS OF CALENDAR YEAR 1941

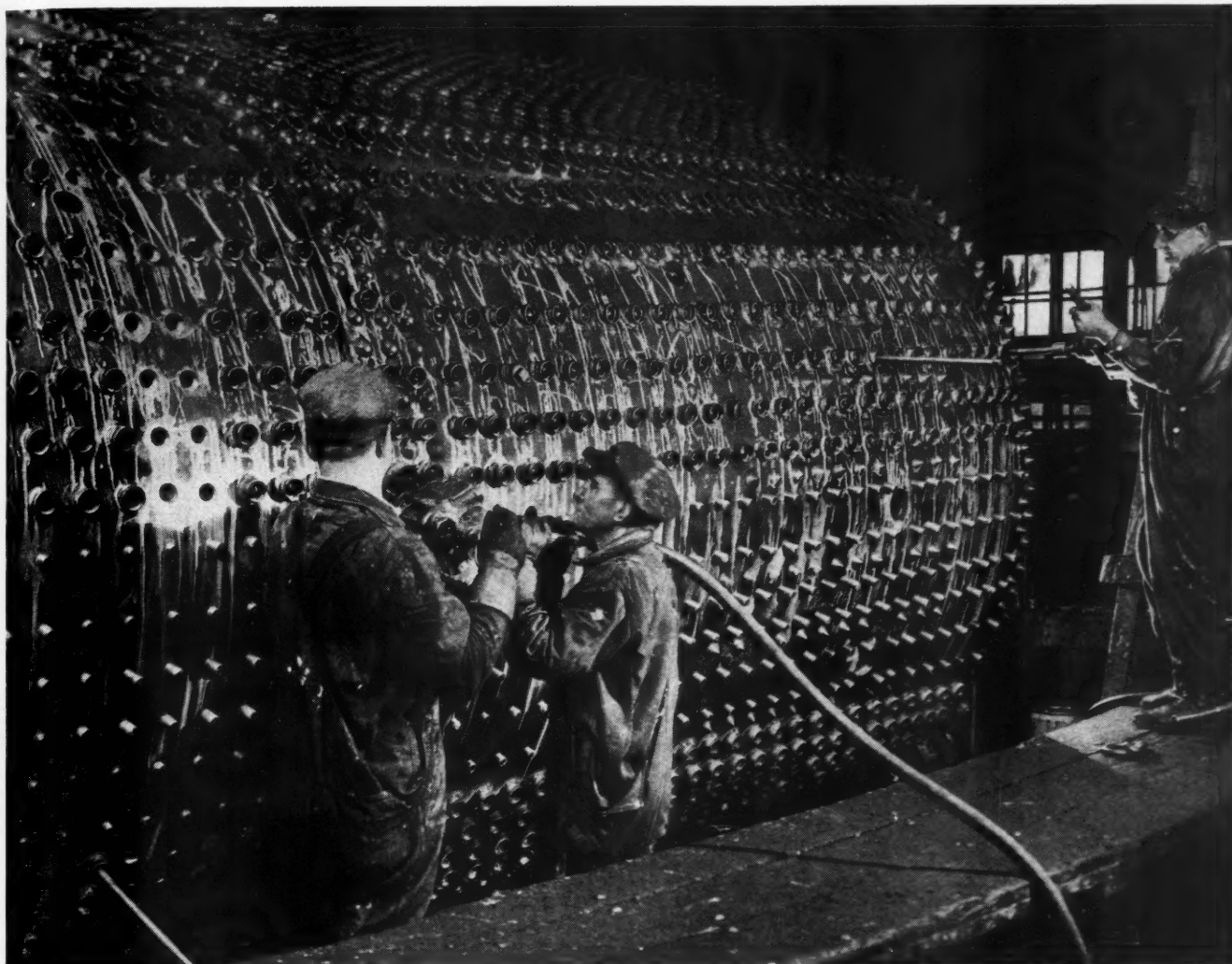
Name of road	Av. mileage operated during period	Operating revenues			Operating expenses			Operating ratio	Net from railway operation	Net railway operating income	
		Freight	Passenger	Total (inc. misc.)	Maintenance of Way and structures	Equipment	Traffic			1941	1940
Akron, Canton & Youngstown .....	March 171	\$ 245,753	\$ 30	\$257,740	\$29,240	\$25,013	\$13,664	58.0	\$108,167	\$83,830	\$67,968
Alton .....	3 mos. 171	685,388	105	715,937	79,138	67,197	200,059	58.3	298,190	228,568	184,912
Alton .....	March 959	1,174,243	237,328	1,634,822	175,572	243,662	44,210	71.7	462,022	354,398	163,355
Alton .....	3 mos. 959	3,120,696	4,449,295	7,103,603	433,603	708,217	133,102	74.1	1,154,058	842,089	73,318
Atchison, Topeka & Santa Fe System .....	March 13,430	12,215,559	1,529,610	15,094,263	2,095,223	3,484,514	477,333	80.7	2,908,013	1,415,287	1,489,210
Atlanta & West Point .....	3 mos. 13,431	34,724,281	4,888,552	43,292,711	5,415,986	9,819,158	1,416,089	77.6	9,681,798	5,187,232	5,298,421
Atlanta & West Point .....	March 93	145,336	31,040	200,817	17,690	26,072	9,206	69.2	61,855	40,585	22,449
Atlanta & West Point .....	3 mos. 93	391,388	91,825	552,433	51,554	78,681	26,105	73.0	149,279	95,378	2,063
Western of Alabama .....	March 133	145,068	31,165	195,985	27,509	32,347	8,655	77.4	44,339	24,211	10,253
Atlanta, Birmingham & Coast .....	3 mos. 133	381,105	93,774	530,827	68,107	95,307	24,672	78.1	116,304	61,087	53,694
Atlanta, Birmingham & Coast .....	March 639	301,549	57,247	381,478	54,940	57,783	25,422	81.0	72,363	47,496	18,775
Atlanta, Birmingham & Coast .....	3 mos. 639	852,884	153,252	1,069,070	161,323	166,824	72,845	82.9	182,473	109,336	44,358
Atlantic Coast Line .....	March 5,097	4,232,128	1,445,433	6,239,003	493,788	943,059	166,696	64.5	2,216,332	1,441,332	1,285,331
Charleston & Western Carolina .....	3 mos. 5,098	1,132,560	3,992,385	17,648,304	1,344,711	2,722,271	534,571	55.4	6,107,738	4,304,748	3,620,822
Charleston & Western Carolina .....	March 343	282,012	1,249	288,366	25,450	34,510	9,554	57.1	133,827	88,557	83,415
Charleston & Western Carolina .....	3 mos. 343	789,551	4,559	809,340	76,178	103,544	27,907	57.8	341,166	236,166	24,306
Baltimore & Ohio .....	March 6,385	16,528,804	926,237	18,368,429	1,682,992	4,048,933	437,026	68.8	5,734,329	4,701,490	4,358,050
Staten Island Rapid Transit .....	3 mos. 6,385	44,644,223	2,919,082	50,178,907	4,602,702	11,419,999	1,205,222	71.4	14,350,153	11,333,235	10,316,672
Staten Island Rapid Transit .....	March 24	64,067	66,278	130,262	14,206	22,705	1,052	96.6	4,728	20,453	31,669
Staten Island Rapid Transit .....	3 mos. 24	187,636	194,747	404,498	38,419	65,593	3,359	94.8	20,864	55,381	83,536
Bangor & Aroostook .....	March 603	634,890	21,245	675,178	79,989	98,588	5,313	53.6	312,996	225,774	222,084
Besemer & Lake Erie .....	3 mos. 603	1,673,941	60,763	1,786,560	247,661	285,990	15,383	59.3	727,576	517,202	513,598
Besemer & Lake Erie .....	March 216	1,162,241	650	1,175,139	123,190	352,755	11,718	63.0	434,521	280,267	381,325
Besemer & Lake Erie .....	3 mos. 221	2,964,966	2,210	3,000,810	367,532	1,012,525	35,839	70.8	875,533	542,816	807,343
Boston & Maine .....	March 1,906	3,572,298	656,435	4,258,523	517,798	628,172	69,463	65.9	1,623,680	1,083,817	806,391
Burlington, Rock Island .....	3 mos. 1,906	9,805,948	1,906,078	13,000,307	1,587,513	1,824,942	208,499	69.5	4,028,437	2,775,388	2,022,181
Burlington, Rock Island .....	March 255	66,602	18,491	85,093	14,328	16,340	4,215	91.0	8,272	2,729	4,983
Burlington, Rock Island .....	3 mos. 255	185,179	53,959	263,778	43,437	46,150	13,628	101.5	4,001	32,018	47,639
Cambria & Indiana .....	March 37	168,442	.....	168,603	5,333	62,353	427	52.64	79,847	31,126	106,501
Canadian Pacific Lines in Maine .....	3 mos. 37	499,247	.....	499,600	16,320	182,589	1,249	53.03	234,657	95,166	316,736
Canadian Pacific Lines in Maine .....	March 234	467,511	12,098	491,149	25,927	80,820	6,223	57.9	193,819	168,717	121,027
Canadian Pacific Lines in Maine .....	3 mos. 234	1,203,448	42,387	1,286,930	73,274	205,780	19,654	57.6	545,939	509,206	409,314
Canadian Pacific Lines in Vermont .....	March 91	105,654	8,181	122,891	11,236	20,858	2,070	91.9	9,969	2,439	19,486
Central of Georgia .....	3 mos. 91	279,078	24,615	334,256	31,373	67,414	6,822	98.3	5,702	14,495	79,388
Central of Georgia .....	March 1,863	1,454,589	169,332	1,806,580	175,542	306,630	53,909	71.4	517,203	396,166	334,230
Central of Georgia .....	3 mos. 1,863	3,921,910	482,684	4,897,072	521,553	886,137	163,306	76.6	1,143,517	785,149	672,892
Central of New Jersey .....	March 711	2,929,669	349,294	3,479,705	41,833	756,253	41,833	74.6	882,897	424,209	206,295
Central Vermont .....	3 mos. 711	8,210,384	1,010,777	9,778,038	839,816	2,248,277	129,652	75.8	2,366,995	1,113,511	533,306
Central Vermont .....	March 422	547,132	33,117	615,719	64,988	96,198	11,727	74.1	159,352	135,475	94,666
Central Vermont .....	3 mos. 422	1,504,578	105,751	1,709,686	170,929	297,155	33,334	75.5	418,994	347,223	220,253
Chesapeake & Ohio .....	March 3,114	12,496,374	310,250	13,165,008	1,151,151	2,134,021	221,659	49.8	6,605,726	4,581,892	4,692,610
Chicago & Eastern Illinois .....	3 mos. 3,114	31,593,467	827,157	33,363,268	3,273,325	6,157,258	614,594	55.6	14,806,218	9,967,064	10,268,874
Chicago & Eastern Illinois .....	March 925	1,349,165	18,020	1,666,007	176,454	245,137	58,355	67.1	507,640	457,640	327,635
Chicago & Eastern Illinois .....	3 mos. 925	3,581,141	462,197	4,315,274	449,044	736,133	179,261	71.1	1,307,060	1,047,060	675,222
Chicago & Illinois Midland .....	March 131	423,829	711	445,222	47,969	72,752	20,378	60.0	178,234	117,599	111,229
Chicago & North Western .....	3 mos. 131	1,231,911	1,811	1,286,794	137,282	217,501	69,135	61.5	324,767	324,767	304,604
Chicago & North Western .....	March 8,319	6,179,969	870,777	7,937,493	950,758	1,915,094	3,023,910	75.4	1,954,446	1,281,153	1,108,734
Chicago & North Western .....	3 mos. 8,319	17,023,548	2,692,647	22,218,452	2,786,799	4,136,181	571,784	77.8	4,922,463	3,012,499	2,394,681
Chicago, Burlington & Quincy .....	March 8,958	7,259,407	690,387	8,882,570	923,418	1,462,826	236,370	67.8	2,838,318	2,134,293	1,831,577
Chicago Great Western .....	3 mos. 8,958	19,967,079	2,215,353	24,808,068	2,084,648	4,097,318	717,658	67.5	8,073,311	5,954,998	5,031,243
Chicago Great Western .....	March 1,502	1,552,076	59,649	1,716,700	178,531	244,224	63,570	69.9	530,880	418,244	225,499
Chicago Great Western .....	3 mos. 1,502	4,356,185	171,596	4,851,627	173,146	201,208	186,055	69.8	1,466,071	1,103,500	552,813
Chicago, Indianapolis & Louisville .....	March 549	827,669	42,159	952,021	70,518	166,344	27,028	64.1	324,016	291,282	185,815
Chicago, Indianapolis & Louisville .....	3 mos. 549	2,236,979	112,478	2,557,260	203,421	473,632	79,624	68.0	817,282	672,606	380,782

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# Care in Staybolt Application

has an important bearing on future locomotive maintenance



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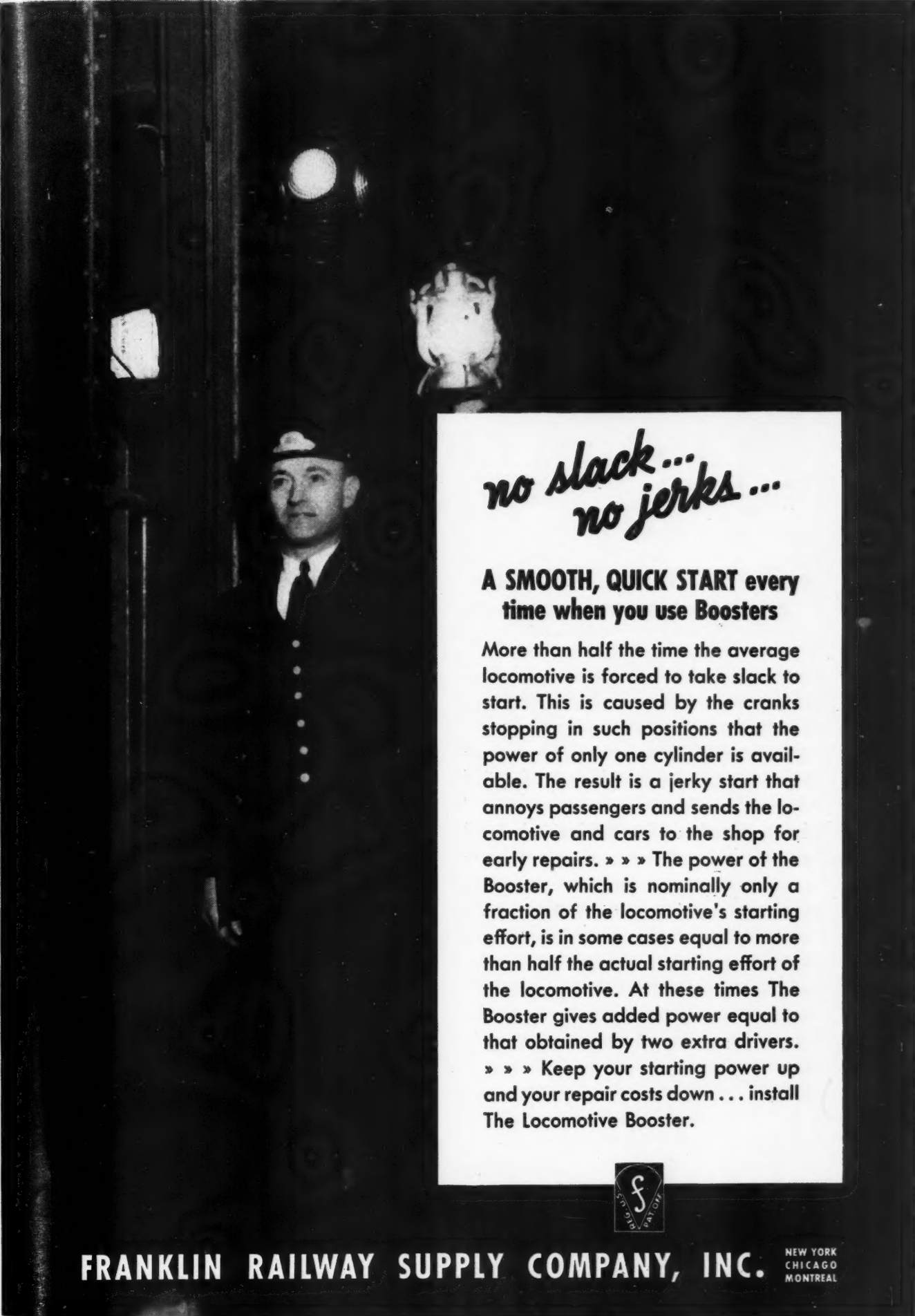
## REVENUES AND EXPENSES OF RAILWAYS

MONTH OF MARCH AND THREE MONTHS OF CALENDAR YEAR 1941—CONTINUED

Name of road	Av. mileage operated during period	Operating revenues			Operating expenses			Operating ratio	Net from railway operation	Net railway operating income			
		Freight	Passenger	Total (inc. misc.)	Maintenance of way and structures	Equipment	Traffic			Trans- portation	Total	1941	1940
Chicago, Milwaukee, St. Paul & Pacific	March 3 mos.	10,855	\$8,955,567	\$708,974	\$10,576,684	\$829,124	\$1,733,655	\$230,327	\$3,666,257	\$6,860,856	\$2,979,828	\$2,665,928	\$885,928
Chicago, Milwaukee, St. Paul & Pacific	March 3 mos.	10,855	24,635,710	2,117,850	29,340,118	2,373,974	1,163,701	662,974	10,668,874	20,067,074	7,107,058	6,082,751	2,896,019
Chicago, Rock Island & Pacific	March 3 mos.	7,944	6,029,300	663,953	7,797,641	751,455	1,294,734	261,032	2,922,108	5,311,852	1,771,184	1,449,363	151,433
Chicago, Rock Island & Pacific	March 3 mos.	7,979	16,672,811	2,679,016	20,984,093	1,944,908	3,725,124	791,418	7,703,331	15,208,132	4,304,003	3,378,201	654,961
Chicago, St. Paul, Minneapolis & Omaha	March 3 mos.	1,629	1,267,495	121,638	1,490,803	159,021	261,114	39,198	682,728	1,207,865	167,083	54,905	—89,319
Clinchfield Railroad	March 3 mos.	308	3,598,652	380,831	4,265,616	34,059	745,573	117,200	2,035,642	3,549,010	375,605	42,321	—212,699
Clinchfield Railroad	March 3 mos.	308	999,136	5,093	1,009,983	34,315	123,197	20,127	170,007	364,899	567,509	570,344	360,442
Clinchfield Railroad	March 3 mos.	308	2,711,279	11,812	2,740,565	107,481	377,151	38,614	489,621	1,086,345	1,423,345	1,439,095	1,138,733
Colorado & Southern	March 3 mos.	786	531,747	40,700	624,686	49,405	118,347	13,993	227,018	435,726	119,432	95,556	—2,571
Colorado & Southern	March 3 mos.	786	1,500,421	115,153	1,768,362	131,425	337,544	39,409	638,529	1,225,835	334,063	261,331	36,693
Colorado & Southern	March 3 mos.	804	345,126	41,566	454,711	50,542	78,248	18,216	162,734	3,004,856	76,977	44,031	33,312
Colorado & Southern	March 3 mos.	804	982,023	140,509	1,322,816	154,911	223,595	54,873	474,507	1,402,489	213,550	126,083	112,283
Colorado & Wyoming	March 3 mos.	42	91,075	.....	139,205	5,060	10,153	532	46,541	67,085	41,896	42,457	34,395
Colorado & Wyoming	March 3 mos.	42	259,338	.....	400,724	14,354	33,183	1,598	131,837	194,122	122,985	122,123	105,971
Columbus & Greenville	March 3 mos.	168	93,190	.....	101,986	12,873	11,524	4,737	37,143	78,687	11,490	12,618	9,311
Columbus & Greenville	March 3 mos.	168	277,413	8,526	302,871	39,088	44,954	14,344	105,858	248,273	23,852	26,663	7,151
Delaware & Hudson	March 3 mos.	848	2,572,541	75,922	2,745,135	246,397	502,608	40,335	936,370	1,814,134	770,427	716,187	371,102
Delaware & Hudson	March 3 mos.	848	7,452,863	234,191	7,455,089	733,363	1,408,553	121,190	2,520,076	5,775,098	1,804,814	1,674,281	1,178,435
Delaware, Lackawanna & Western	March 3 mos.	995	3,806,510	525,419	4,799,087	239,092	917,327	113,151	2,043,299	3,473,748	897,539	867,072	251,501
Delaware, Lackawanna & Western	March 3 mos.	995	10,807,382	1,561,943	13,700,032	716,577	2,469,339	332,578	5,929,262	9,926,812	2,438,120	1,771,915	1,213,257
Denver & Rio Grande Western	March 3 mos.	2,547	1,964,502	137,824	2,205,485	235,288	604,139	83,916	782,380	1,804,485	195,716	176,562	—180,895
Denver & Rio Grande Western	March 3 mos.	2,548	5,537,090	356,965	6,181,990	518,869	1,043,036	240,773	2,288,058	5,155,303	414,129	358,426	—16,925
Denver & Salt Lake	March 3 mos.	232	160,632	5,918	175,174	21,991	43,249	2,754	61,910	139,428	10,639	58,938	29,394
Denver & Salt Lake	March 3 mos.	232	524,581	17,089	569,641	60,087	128,985	8,047	188,217	414,181	80,360	219,080	307,127
Detroit & Mackinac	March 3 mos.	242	36,657	2,021	49,151	7,935	12,407	835	24,879	48,870	99.3	—5,559	—1,016
Detroit & Mackinac	March 3 mos.	242	109,045	8,135	145,387	22,845	35,411	2,793	73,541	143,411	98.6	—17,371	—10,495
Detroit & Toledo Shore Line	March 3 mos.	50	444,426	.....	445,597	20,957	25,098	8,675	104,223	166,579	37.4	279,018	98,672
Detroit & Toledo Shore Line	March 3 mos.	50	1,240,332	.....	1,243,903	60,708	74,861	26,270	287,558	471,947	580,134	366,097	331,009
Detroit, Toledo & Ironton	March 3 mos.	472	852,676	218	879,646	52,280	76,119	12,853	177,480	339,530	388,937	346,328	258,322
Detroit, Toledo & Ironton	March 3 mos.	472	2,542,257	568	2,609,256	170,418	306,687	37,280	520,498	1,090,989	1,070,171	952,482	904,746
Duluth, Missabe & Iron Range	March 3 mos.	541	130,959	2,827	132,516	25,914	253,491	4,224	177,137	1,617,744	705,974	797,588	563,540
Duluth, Missabe & Iron Range	March 3 mos.	541	326,334	7,614	393,600	46,072	718,120	12,626	507,384	1,769,744	2,385,194	2,396,326	1,623,617
Duluth, Winnipeg & Pacific	March 3 mos.	175	135,311	867	139,375	22,900	21,705	2,013	53,817	104,530	24,106	891	—13,747
Duluth, Winnipeg & Pacific	March 3 mos.	175	429,758	3,123	442,602	60,515	60,224	5,952	178,651	319,059	89,771	28,775	—8,294
Elgin, Joliet & Eastern	March 3 mos.	390	2,273,505	4	2,564,319	156,466	322,867	14,640	821,179	1,359,274	862,961	687,390	213,460
Elgin, Joliet & Eastern	March 3 mos.	390	6,367,349	10	6,367,349	445,132	964,532	43,210	2,346,715	3,923,741	2,352,757	1,867,874	898,821
Erie	March 3 mos.	2,257	7,893,518	357,798	8,754,703	514,864	1,509,499	181,536	3,352,292	5,831,872	2,003,533	1,708,095	778,651
Erie	March 3 mos.	2,263	21,074,742	1,074,742	23,628,494	1,485,810	4,179,729	538,267	8,828,688	15,848,969	5,677,606	4,782,479	2,438,984
Florida East Coast	March 3 mos.	685	638,691	627,894	1,411,563	112,008	162,219	33,231	454,339	831,980	499,307	413,594	322,857
Florida East Coast	March 3 mos.	685	1,891,604	1,773,754	4,098,355	328,665	482,287	101,164	1,295,484	2,467,804	1,394,490	1,136,246	1,030,948
Georgia Railroad	March 3 mos.	329	368,257	23,116	420,701	45,298	68,925	19,236	158,312	306,022	98,179	99,520	47,448
Georgia Railroad	March 3 mos.	329	1,036,467	56,375	1,701,883	108,318	191,485	56,468	461,829	860,352	263,464	270,709	119,742
Georgia & Florida	March 3 mos.	408	108,461	1,353	114,059	25,155	17,567	8,749	41,853	98,613	7,506	141	—7,337
Georgia & Florida	March 3 mos.	408	304,360	3,676	319,561	68,988	52,852	26,781	119,995	284,444	11,702	—8,863	—39,205
Grand Trunk Western	March 3 mos.	1,029	2,483,951	71,801	2,717,190	229,141	427,877	39,455	966,927	1,731,634	850,396	711,647	346,875
Grand Trunk Western	March 3 mos.	1,029	6,730,723	213,606	7,419,747	689,973	1,336,361	113,339	2,790,970	5,022,580	1,993,016	1,637,247	912,997
Canadian National Lines in New England	March 3 mos.	172	148,006	1,621	149,598	27,743	2,624	2,624	74,645	143,362	37,593	—9,715	—74,883
Canadian National Lines in New England	March 3 mos.	172	371,840	8,709	464,598	77,497	65,191	7,952	201,986	385,814	30,354	—101,519	—191,423
Great Northern	March 3 mos.	8,066	6,212,945	320,027	7,051,239	926,883	1,560,827	189,583	2,511,444	5,422,621	856,521	739,416	502,026
Great Northern	March 3 mos.	8,066	16,459,964	964,400	18,855,915	2,464,835	4,588,515	537,342	7,200,237	15,597,332	1,125,511	809,843	744,774
Green Bay & Western	March 3 mos.	234	153,981	354	158,797	15,777	16,579	8,494	49,656	103,524	39,644	30,062	22,311
Green Bay & Western	March 3 mos.	234	458,601	928	472,133	65,365	53,073	26,365	152,389	312,356	113,989	84,762	68,347
Gulf & Ship Island	March 3 mos.	259	141,277	7,726	160,793	21,582	21,260	2,929	60,173	110,544	33,153	19,986	—861
Gulf & Ship Island	March 3 mos.	259	343,571	30,925	404,941	58,059	53,141	9,219	172,938	308,220	44,924	4,401	—57,910

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no jerks...*

**A SMOOTH, QUICK START every  
time when you use Boosters**

More than half the time the average locomotive is forced to take slack to start. This is caused by the cranks stopping in such positions that the power of only one cylinder is available. The result is a jerky start that annoys passengers and sends the locomotive and cars to the shop for early repairs. » » » The power of the Booster, which is nominally only a fraction of the locomotive's starting effort, is in some cases equal to more than half the actual starting effort of the locomotive. At these times The Booster gives added power equal to that obtained by two extra drivers. » » » Keep your starting power up and your repair costs down . . . install The Locomotive Booster.



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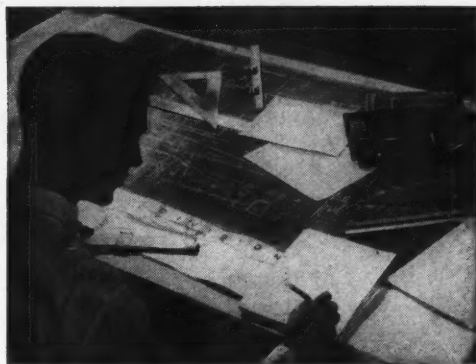
## REVENUES AND EXPENSES OF RAILWAYS

MONTH OF MARCH AND THREE MONTHS OF CALENDAR YEAR 1941—CONTINUED

MONTH OF MARCH AND THREE MONTHS OF CALENDAR YEAR 1941—CONTINUED												
Name of road	Av. mileage operated during period	Operating revenues			Operating expenses			Operating ratio	Net from railway operation	Net railway operating income		
		Freight	Passenger	Total (inc. misc.)	Maintenance of way and structures	Equipment	Traffic			Trans- portation	Total	1941
Gulf Mobile & Ohio	1,973	\$1,833,255	\$44,865	\$1,951,992	\$247,273	\$279,751	\$88,607	\$549,285	\$1,257,990	64.4	\$449,902	\$346,268
	1,973	4,960,707	126,359	5,293,332	784,453	803,231	255,320	1,567,594	3,862,776	67.7	1,106,556	816,482
	4,951	8,510,271	1,016,246	10,249,595	867,590	2,080,400	211,786	3,367,038	7,873,816	67.0	2,589,357	2,678,251
	4,950	23,508,845	2,842,963	28,256,687	2,559,028	5,597,618	663,605	9,733,785	19,353,209	69.2	6,437,860	6,642,397
Illinois Central	1,608	1,261,139	70,126	1,421,175	123,434	208,610	32,744	533,949	946,255	66.6	474,920	327,980
	1,608	3,272,323	173,979	3,683,315	364,301	567,644	102,670	1,533,649	2,707,185	73.5	976,130	776,130
	6,559	9,771,410	1,086,372	11,670,770	991,024	2,289,010	244,530	3,900,987	7,814,071	67.0	3,856,699	3,523,743
	6,558	26,781,168	3,016,942	31,940,002	2,923,329	6,165,262	766,275	11,267,434	22,260,394	69.7	9,679,608	6,972,271
Illinois Terminal	477	433,830	64,633	543,113	52,689	72,429	17,250	181,880	341,076	62.80	202,037	141,112
	477	1,203,884	183,011	1,521,218	146,645	208,707	51,384	524,767	984,282	64.70	536,936	375,268
	879	1,289,230	151,047	1,460,075	130,922	212,494	55,657	426,196	884,550	60.6	575,525	391,746
	879	3,524,671	151,047	4,036,888	367,798	606,753	163,154	1,173,036	2,484,885	61.6	1,552,003	1,019,483
Kansas City Southern	328	213,418	369	216,280	11,823	9,081	8,377	47,564	87,600	40.5	128,680	103,990
	328	603,136	1,200	611,865	30,491	29,621	25,864	132,989	251,113	41.0	360,752	242,211
	156	32,416	76	35,065	21,624	32,717	23,959	86,108	245,6	245.6	—51,043	—66,411
	156	87,927	224	95,411	55,543	90,576	65,964	234,324	234,324	245.6	—138,913	—198,914
Kansas, Oklahoma & Gulf	96	184,877	.....	185,691	17,861	29,734	3,818	54,046	111,618	60.1	74,073	43,035
	96	495,815	.....	495,815	53,719	83,743	11,224	149,495	316,612	63.6	181,576	112,264
	190	380,935	.....	380,935	26,918	66,993	6,902	122,180	239,858	62.6	143,002	100,957
	190	1,068,679	.....	1,068,679	82,109	174,903	22,147	344,616	670,544	62.4	404,197	280,896
Lehigh & Hudson River	1,269	4,114,198	162,381	4,538,354	379,935	647,905	103,340	1,785,146	3,047,015	67.1	1,491,339	1,119,766
	1,269	11,520,848	487,834	12,725,222	855,409	1,887,074	311,593	5,099,422	8,337,081	67.1	4,192,841	3,186,966
	881	769,724	20,530	822,640	124,233	281,224	85,831	579,485	1,371,236	58.3	342,932	248,903
	881	2,188,505	56,673	2,330,981	341,223	821,224	85,831	579,485	1,371,236	58.3	959,745	698,140
Louisiana & Arkansas	4,865	8,722,888	696,532	9,971,407	888,934	1,895,683	185,585	3,096,387	6,363,801	63.8	3,607,606	1,959,438
	4,865	24,029,124	2,092,878	27,674,447	2,686,503	5,577,831	564,159	8,856,569	18,556,154	67.1	9,107,293	5,415,452
	991	1,353,759	69,237	1,362,333	136,670	195,642	11,262	431,453	808,406	61.4	361,276	278,002
	991	3,206,315	209,553	3,669,436	415,656	583,867	33,433	1,276,768	2,411,692	65.7	1,257,744	954,642
Louisville & Nashville	352	106,095	2	107,498	11,977	10,000	2,371	28,869	59,562	55.4	47,936	37,161
	352	321,417	12	326,478	28,912	30,175	7,177	88,575	174,321	53.4	152,137	119,990
	1,409	791,766	14,280	840,486	145,688	137,918	49,307	289,659	669,092	79.7	171,394	132,526
	1,409	2,152,497	35,481	2,287,311	309,695	414,974	148,870	837,685	1,821,869	79.7	465,442	341,251
Minneapolis & St. Louis	4,271	2,049,483	52,153	2,270,477	340,178	422,326	62,215	994,390	1,907,515	84.0	362,962	177,414
	4,271	5,859,504	165,590	6,492,153	905,239	1,178,187	184,754	2,944,075	5,478,778	84.4	1,013,375	485,716
	550	190,909	7,612	211,128	39,732	39,526	81,497	174,768	36,306	82.8	22,327	17,929
	550	510,088	21,789	568,615	105,216	105,843	21,651	238,786	490,609	86.3	36,854	32,883
Duluth, South Shore & Atlantic	152	57,135	469	64,906	18,212	6,171	2,216	21,545	51,825	79.9	78,081	7,897
	152	154,660	1,649	178,383	33,343	18,873	9,883	63,021	133,105	74.6	45,278	19,628
	158	111,782	1,327	117,263	19,899	11,053	6,288	22,506	65,378	72.2	30,643	16,726
	158	279,720	12,014	297,996	46,193	33,681	22,915	70,417	185,235	62.2	112,761	84,020
Spokane International	365	117,150	1,402	125,394	24,375	36,008	7,762	39,821	88,882	70.9	36,512	31,991
	365	301,490	4,182	331,777	68,742	36,008	22,288	108,092	250,368	75.5	81,409	68,234
	193	204,615	183	206,221	25,513	25,119	2,871	51,374	100,755	50.9	100,755	66,753
	193	562,608	590	567,678	64,066	59,172	9,550	144,038	288,760	50.9	278,918	192,308
Mississippi Central	3,293	2,171,515	225,936	2,637,493	326,740	416,512	106,798	936,319	1,909,053	72.4	728,440	538,919
	3,293	5,963,030	619,122	7,256,612	913,805	1,155,015	320,645	2,233,326	5,486,534	75.6	1,770,078	1,276,039
	7,146	7,134,082	575,372	8,112,566	1,073,994	1,513,454	247,281	2,910,295	6,025,105	71.6	2,387,981	1,877,987
	7,146	20,390,717	1,766,737	24,175,567	2,919,692	4,223,069	741,187	8,461,084	17,108,279	70.8	7,067,288	5,580,787
Missouri Pacific	1,772	1,431,159	41,836	1,545,799	204,387	182,025	42,510	448,852	933,289	60.38	612,510	533,551
	1,772	4,029,809	124,564	4,369,770	592,228	597,162	129,657	1,279,114	2,706,277	61.93	1,603,493	1,430,202
	1,155	879,431	87,560	1,086,690	172,778	194,235	27,857	419,110	864,716	79.6	2,387,981	1,877,987
	1,155	2,443,754	267,950	3,049,191	494,005	534,219	84,968	1,201,472	2,495,669	81.9	553,522	364,082
Gulf Coast Lines	172	542,171	610	545,165	36,438	34,595	501	121,340	195,767	35.9	314,037	220,638
	172	1,329,324	1,602	1,337,101	96,579	96,695	1,431	307,729	510,535	38.2	826,566	722,550
International Great Northern	172	542,171	610	545,165	36,438	34,595	501	121,340	195,767	35.9	314,037	220,638
	172	1,329,324	1,602	1,337,101	96,579	96,695	1,431	307,729	510,535	38.2	826,566	722,550
Monongahela	172	542,171	610	545,165	36,438	34,595	501	121,340	195,767	35.9	314,037	220,638
	172	1,329,324	1,602	1,337,101	96,579	96,695	1,431	307,729	510,535	38.2	826,566	722,550

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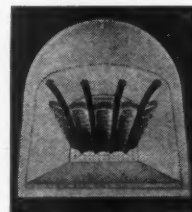
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## REVENUES AND EXPENSES OF RAILWAYS

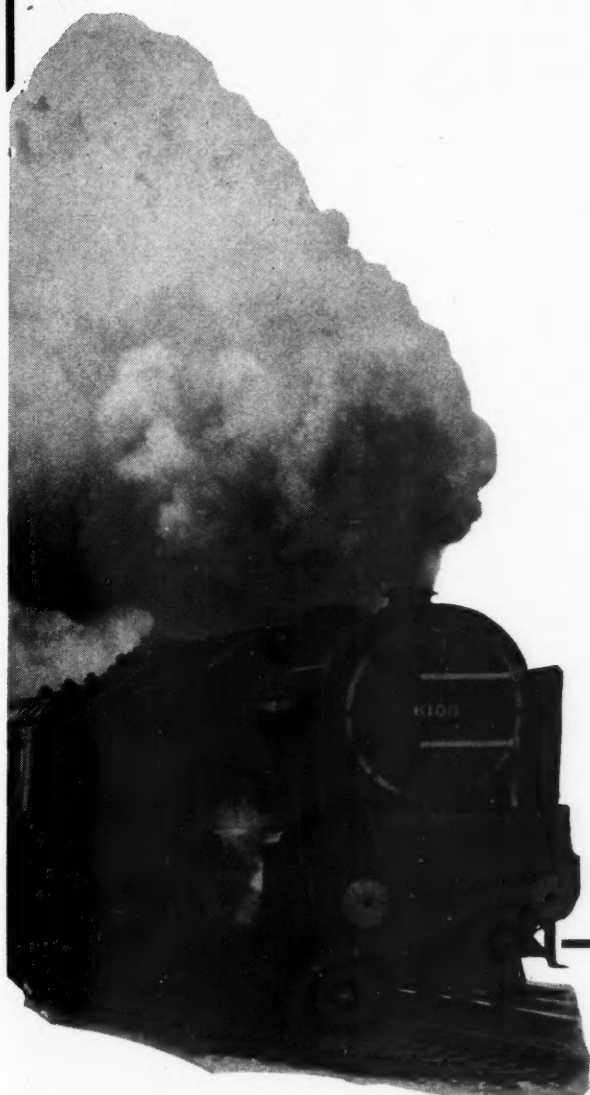
MONTH OF MARCH AND THREE MONTHS OF CALENDAR YEAR 1941—CONTINUED

Name of road	Av. mileage operated during period	Operating revenues—Total			Operating expenses			Operating ratio	Net from railway operation	Net railway operating income	
		Freight	Passenger	(inc. misc.)	Way and structures	Equip-ment	Traffic			1941	1940
Montour	March	\$193,827	\$75	\$193,827	\$8,832	\$40,643	\$770	\$52,030	\$108,629	\$50,129	\$74,307
	3 mos.	51	158,614	75	158,683	116,031	2,181	141,236	306,130	112,020	190,796
Nashville, Chattanooga & St. Louis	March	1,312,691	156,148	1,468,839	16,883	203,671	71,043	188,631	1,071,335	372,527	529,119
	3 mos.	1,111	3,601,918	424,644	4,446,090	405,934	212,064	1,653,660	3,192,416	863,970	732,657
Nevada Northern	March	65,720	755	70,827	8,732	4,925	1,244	12,373	34,020	30,983	32,363
	3 mos.	165	159,269	1,841	174,467	11,457	3,677	32,240	94,113	86,354	61,766
New York Central	March	28,185,760	4,945,064	36,569,043	3,346,410	7,095,667	511,060	13,018,240	25,294,332	6,859,732	5,593,738
	3 mos.	10,943	76,988,480	15,230,302	102,056,722	9,565,460	2,157,963	37,426,882	73,571,012	17,967,973	14,330,031
Pittsburgh & Lake Erie	March	2,278,378	44,028	2,390,002	174,131	730,722	36,365	685,682	1,710,515	264,302	598,845
	3 mos.	233	6,118,458	134,680	6,433,883	516,362	107,298	1,931,076	4,897,210	610,941	1,557,659
New York, Chicago & St. Louis	March	4,777,906	59,124	4,954,987	370,392	625,806	120,602	1,522,421	2,763,631	1,716,851	1,370,847
	3 mos.	1,704	12,863,509	185,678	13,378,397	1,061,473	335,108	4,298,423	7,887,086	4,336,775	3,367,515
New York, New Haven & Hartford	March	5,251,153	2,323,431	8,370,237	901,893	1,299,220	102,730	3,069,756	5,794,520	2,009,217	1,280,554
	3 mos.	1,847	14,408,427	6,731,100	23,350,555	3,701,627	300,862	8,724,522	16,438,725	5,212,530	3,777,697
New York Connecting	March	328,337	.....	328,337	39,149	7,608	.....	37,262	90,099	255,332	101,717
	3 mos.	21	1,023,389	.....	1,052,071	25,940	.....	90,272	239,687	676,536	284,802
New York, Ontario & Western	March	435,994	2,217	438,344	51,781	88,783	16,196	261,592	440,984	1,625	34,706
	3 mos.	576	1,193,558	15,442	1,338,752	288,348	47,587	749,523	1,290,935	82,334	167,519
New York, Susquehanna & Western	March	276,439	31,075	321,767	20,789	32,614	2,343	133,754	199,176	122,591	92,366
	3 mos.	144	783,237	84,098	911,283	55,796	7,353	382,397	560,806	260,836	149,619
Norfolk & Western	March	9,952,565	397,401	10,600,733	1,004,886	2,238,141	154,280	2,095,910	5,685,771	2,978,506	3,256,868
	3 mos.	2,191	27,833,897	904,434	29,430,281	6,118,098	433,951	5,973,638	15,946,255	7,973,925	8,810,549
Norfolk Southern	March	400,727	4,531	420,250	75,215	54,444	25,161	151,397	329,606	58,830	40,967
	3 mos.	733	1,140,351	12,797	1,192,909	227,334	72,810	426,238	956,896	140,376	85,651
Northern Pacific	March	5,038,992	309,697	5,860,480	682,947	1,192,763	164,565	2,018,405	4,332,487	904,705	1,228,132
	3 mos.	6,719	13,588,372	892,680	15,835,437	3,403,374	464,409	5,928,764	12,492,130	1,495,672	2,484,379
Northwestern Pacific	March	216,891	5,955	239,313	66,801	38,701	2,259	111,544	245,854	102,7	6,541
	3 mos.	352	596,235	54,171	707,752	125,124	8,188	394,532	759,417	109,330	153,247
Oklahoma City-Ada-Atoka	March	21,831	.....	22,124	4,615	2,084	624	8,155	16,810	2,860	301
	3 mos.	132	60,055	Dr. 5	12,099	4,618	2,003	24,511	47,291	13,843	7,089
Pennsylvania	March	36,530,329	6,933,226	47,014,613	42,275,831	11,476,301	693,524	16,488,301	34,249,656	8,055,717	7,444,648
	3 mos.	10,246	99,884,599	20,416,369	130,319,734	31,476,302	2,110,477	46,307,724	96,215,405	21,696,666	20,246,058
Long Island	March	751,670	1,209,116	2,070,216	210,289	342,433	7,890	981,359	1,581,413	257,688	88,469
	3 mos.	379	2,033,976	3,462,302	5,824,580	625,113	24,063	2,849,869	4,615,489	570,717	59,053
Pennsylvania-Reading Seashore Lines	March	325,033	97,125	444,748	119,160	112,136	5,654	284,456	536,306	120,6	22,710
	3 mos.	411	906,189	264,279	1,234,116	265,813	17,341	821,328	1,447,880	446,197	664,388
Perc Marquette	March	3,075,628	68,993	3,291,658	347,678	606,529	65,021	1,153,320	2,270,124	737,370	584,617
	3 mos.	2,102	8,720,277	227,130	9,349,383	1,747,835	187,597	3,274,605	6,541,557	1,971,960	1,668,397
Pittsburgh & Shawmut	March	96,222	.....	96,222	18,668	18,668	1,663	23,515	58,822	35,130	28,756
	3 mos.	98	250,718	.....	33,439	55,947	6,187	67,809	176,404	67,565	46,320
Pittsburgh & West Virginia	March	444,185	56	463,548	70,240	74,224	17,993	88,990	272,843	154,397	163,077
	3 mos.	136	1,138,862	68	1,201,371	210,281	59,614	245,217	765,343	380,891	302,406
Pittsburgh Shawmut & Northern	March	124,068	.....	124,068	11,991	18,392	3,034	39,898	77,313	46,755	30,988
	3 mos.	190	383,145	.....	36,309	52,469	3,034	117,222	223,987	144,104	113,281
Reading	March	6,038,067	306,198	6,648,320	431,404	1,266,925	71,006	2,293,182	4,207,121	1,693,538	1,495,587
	3 mos.	1,438	16,791,574	887,116	18,463,789	3,652,984	210,803	6,594,031	12,146,758	4,376,012	4,018,609
Richmond, Fredericksburg & Potomac	March	620,729	507,936	1,278,887	82,384	181,889	9,325	389,615	721,518	557,369	296,466
	3 mos.	118	1,678,876	1,325,098	3,388,235	232,791	28,057	1,127,074	2,066,591	913,923	647,010
Rutland	March	230,239	28,525	315,625	31,486	63,577	12,253	166,973	286,912	9,657	11,391
	3 mos.	407	595,121	79,848	843,150	179,865	31,265	479,407	822,990	38,292	37,083
St. Louis-San Francisco	March	3,943,983	306,663	4,622,898	538,434	1,227,471	123,412	1,631,711	3,400,174	885,648	456,485
	3 mos.	4,769	11,052,853	969,192	13,069,256	2,664,283	360,935	4,682,432	9,798,616	2,302,951	2,484,697
St. Louis, San Francisco & Texas	March	139,645	1,256	146,117	22,095	16,243	8,211	57,936	109,769	27,652	2,705
	3 mos.	159	371,892	3,513	390,060	43,782	24,169	161,912	310,639	54,962	19,519

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# 20,000 FEEDWATER HEATERS



ON various railroads throughout the world 20,000 locomotives have been equipped with exhaust steam injectors of the Elesco type. The largest part of these applications has been made on foreign railroads, which, confronted with the necessity for reducing fuel costs, have long since recognized that feeding a boiler with an injector operated by exhaust steam is the most practical means for obtaining high economy in locomotive operation.

The Elesco exhaust steam injector embodies the same principles of design as used in other countries, but has a simplified control especially developed to meet the requirements of American railroad practice. It uses exhaust steam — which otherwise would be wasted — to preheat the feedwater and inject it into the boiler. When exhaust steam is not available the injector changes over automatically to live-steam operation; then back again as soon as exhaust steam becomes available. While the Elesco exhaust steam injector functions equally well both with exhaust steam and with live steam, it always operates with exhaust steam when available, thereby giving substantial economies.

These increased economies, obtainable at low cost of installation, operation, and maintenance, make the Elesco exhaust steam injector an attractive boiler feed for new and existing power.

Here is an excellent example of a British high-speed, express type locomotive, representative of modern British locomotives equipped with the Elesco type of exhaust steam injector, as manufactured in England by Davies and Metcalfe, Ltd.

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SUPERHEATERS • • FEEDWATER HEATERS  
AMERICAN THROTTLES • • STEAM DRYERS  
EXHAUST STEAM INJECTORS • PYROMETERS



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Representative of AMERICAN THROTTLE COMPANY, INC.  
60 East 42nd St., NEW YORK • 122 S. Michigan Ave., CHICAGO  
Montreal, Canada: THE SUPERHEATER COMPANY, LTD.

## REVENUES AND EXPENSES OF RAILWAYS

MONTH OF MARCH AND THREE MONTHS OF CALENDAR YEAR 1941—CONTINUED

Name of road	Av. mileage operated during period	Operating revenues			Operating expenses			Operating ratio	Net from railway operation	Net railway operating income		
		Freight	Passenger	Total (inc. misc.)	Way and structures	Maintenance of equipment	Traffic			Trans- portation	Total	1941
St. Louis Southwestern Lines	1,617	\$2,172,455	\$42,699	\$2,285,070	\$255,280	\$288,474	\$84,098	\$596,687	\$1,301,738	\$869,946	\$715,368	\$347,938
3 mos.	1,638	5,846,008	134,889	6,187,548	677,385	867,808	249,655	1,726,844	3,758,550	2,092,542	1,630,341	836,930
March	4,310	3,943,205	1,410,485	5,848,812	71,973	1,913,175	193,250	5,541,629	4,033,884	1,812,928	1,261,824	525,270
3 mos.	4,310	11,257,662	3,485,870	16,061,021	1,906,850	2,727,864	758,474	5,541,629	11,562,426	4,498,595	3,373,595	1,720,037
Southern Railway	6,567	9,355,225	1,025,131	11,166,183	1,133,996	1,709,518	175,510	3,526,142	6,892,414	3,135,723	2,803,296	1,583,624
3 mos.	6,567	26,192,157	2,747,231	31,058,730	3,317,791	4,929,680	527,849	10,051,355	19,847,869	8,195,713	7,224,476	4,278,194
March	3,115	676,356	68,273	803,761	90,535	156,437	16,577	224,396	511,659	192,711	198,588	164,352
3 mos.	315	1,912,071	228,976	2,296,809	260,476	500,923	46,524	656,753	1,537,881	758,928	484,628	308,671
Cincinnati, New Orleans & Texas Pacific	337	1,541,308	137,695	1,778,482	167,133	331,631	30,453	439,393	1,026,199	521,711	539,846	502,145
3 mos.	337	4,343,511	548,083	5,167,824	487,480	970,957	88,191	1,288,875	3,011,201	1,512,102	1,512,102	1,258,474
March	398	232,012	92,533	377,641	37,324	49,245	2,427	133,671	233,437	115,991	80,563	24,361
3 mos.	398	709,004	234,778	1,098,435	114,645	141,670	7,526	379,642	675,251	423,184	313,587	68,663
New Orleans & Northeastern	204	327,692	35,449	385,924	47,539	32,025	8,012	111,476	211,673	114,900	90,137	41,875
3 mos.	204	906,536	121,890	1,091,609	120,019	105,371	20,454	316,733	401,105	326,894	253,460	105,459
Southern Pacific	8,393	13,725,779	2,038,077	17,048,094	1,471,663	2,806,588	393,575	5,925,204	11,400,350	4,426,900	3,633,944	545,164
3 mos.	8,602	38,115,101	5,503,046	47,129,119	4,129,221	7,858,899	1,077,500	16,908,482	32,472,604	11,067,182	8,779,425	2,039,170
Southern Pacific Steamship Lines	.....	757,034	602	793,363	58,995	106,707	13,688	508,618	702,564	63,610	62,517	58,488
3 mos.	.....	2,314,830	54,839	2,486,627	105,993	333,952	48,159	1,672,881	2,205,045	198,840	188,678	180,704
March	4,417	3,776,638	363,850	4,473,065	606,223	698,804	123,697	1,427,023	3,063,351	1,094,853	730,488	372,519
3 mos.	4,417	10,736,554	1,104,415	12,797,837	1,674,250	1,970,169	365,214	4,102,763	8,721,407	3,150,885	2,310,617	1,140,026
Spokane, Portland & Seattle	948	833,616	23,419	914,863	143,991	90,693	10,620	305,874	580,290	266,353	186,583	88,112
3 mos.	948	2,222,769	74,427	2,455,773	367,146	251,175	31,015	860,619	1,595,681	640,394	418,676	211,193
March	286	223,030	4,249	242,996	36,152	37,357	7,356	80,592	171,649	52,560	36,463	25,338
3 mos.	286	650,136	11,787	704,302	105,103	105,325	20,360	234,950	496,649	154,163	107,416	88,984
Texas & Pacific	1,887	2,084,209	258,736	2,565,148	280,683	447,865	74,755	759,188	1,682,783	662,655	562,283	460,765
3 mos.	1,887	5,951,202	705,794	7,274,068	765,111	1,342,313	224,062	2,214,841	4,895,578	1,812,435	1,529,456	1,176,740
March	162	98,156	221	113,230	1,668	12,283	3,504	33,939	71,971	34,930	33,042	3,958
3 mos.	162	245,415	1,360	286,824	42,681	34,540	9,597	96,587	204,542	82,282	63,641	4,475
Toledo, Peoria & Western	239	236,268	.....	240,005	37,156	16,289	18,382	49,373	132,465	48,582	28,762	29,389
3 mos.	239	637,466	.....	646,422	101,711	48,192	55,056	139,016	377,818	148,782	98,010	94,409
Union Pacific System	9,892	13,106,945	1,507,893	15,816,456	1,876,886	3,511,867	390,989	5,161,540	11,704,002	4,112,454	1,962,337	977,594
3 mos.	9,892	35,333,577	4,245,902	43,139,472	4,482,888	10,241,275	1,196,590	15,014,275	33,169,618	9,969,854	3,664,577	3,187,368
Utah	111	83,241	.....	83,345	8,785	25,171	436	21,038	59,493	23,852	16,473	3,643
3 mos.	111	242,839	.....	243,320	27,057	72,889	1,279	65,245	178,712	71,4	32,218	27,654
March	653	2,415,535	2,672	2,479,930	196,698	440,116	24,321	384,793	1,089,334	940,596	981,986	870,182
3 mos.	653	6,983,106	7,155	7,177,778	554,605	1,234,457	75,835	1,055,086	3,035,117	2,804,201	2,961,641	2,769,482
Wabash	2,409	4,424,883	228,356	4,958,104	484,917	815,779	149,487	1,684,124	3,292,614	1,272,566	941,820	260,927
3 mos.	2,409	11,851,404	645,131	13,336,176	1,402,917	2,188,278	447,390	4,776,415	9,280,141	3,194,545	2,208,224	756,197
March	294	380,630	1,626	389,717	25,529	76,878	13,309	156,251	284,136	166,977	50,702	12,471
3 mos.	294	1,081,615	4,525	1,108,313	71,793	215,717	39,756	464,955	828,368	196,443	152,948	56,377
Western Maryland	859	1,912,241	6,323	1,973,277	183,914	394,002	40,894	469,502	1,140,148	653,129	670,431	448,144
3 mos.	859	5,131,011	19,481	5,150,492	546,235	1,341,398	124,647	1,360,289	3,205,732	1,686,015	1,703,270	1,424,790
March	1,195	1,536,873	52,971	1,619,558	192,251	291,319	65,219	350,453	1,320,275	741	703,023	219,235
3 mos.	1,195	4,130,791	156,937	4,376,638	476,239	809,332	189,330	1,717,167	3,666,506	1,010,132	715,881	424,169
Wheeling & Lake Erie	507	1,664,934	5	1,717,261	213,313	364,977	41,003	444,429	1,101,760	278,088	398,067	283,480
3 mos.	507	4,401,418	24	4,556,103	462,146	1,011,729	115,037	1,245,819	2,940,177	743,738	1,106,372	966,713